A Course of Lectures
ON
PAIN,
AND THE
THERAPEUTIC INFLUENCE OF MECHANICAL AND PHYSIOLOGICAL REST
IN
ACCIDENTS & SURGICAL DISEASES.

Delivered in the Theatre of the Royal College of Surgeons,

BY JOHN HILTON, ESQ., F.R.S.,
SURGEON TO GUY'S HOSPITAL,
PROFESSOR OF ANATOMY AND SURGERY TO THE ROYAL COLLEGE OF SURGEONS.

LECTURE II.—PART III.

Case of disease of the last lumbar vertebra simulating hip-joint disease.

On the 28th of January, 1860, by a physician's request, a little child was brought to me, supposed to be suffering from diseased hip-joint. The physician sent this note with the patient:—"The little child I send to you came before me for supposed disease of the back, but it seems to me to be an affection of the hip-joint. I have, therefore, advised the friends to take your opinion." The patient, a delicate child, had had a most severe pain in the left hip for a week before I saw her. She could not sleep, nor bear any weight upon the left limb. She had pain in the hip, knee, and thigh, was very lame, and suffered intensely upon making any attempt to walk. Considerable constitutional disturbance prevailed. On examination I found the hip-joint free from pain; that is, on movement of the hip-joint—isolated movement—the patient experienced no pain, nor was there, by any manipulative experiment, the slightest evidence of any local heat at the hip-joint. Although there was no pain in the left hip-joint, she presented all the "outlying symptoms" of disease in that joint—lameness, pain in the knee and hip, thigh a little advanced, intense pain in the hip on striking the sole of the foot with the hand, and flattening of the nates on the left side. On placing her recumbent, and manipulating the hip-joint alone, she expressed no feeling of pain. There was no increase of heat (the pathognomonic sign of local inflammation) in the neighbourhood of the hip-joint, and no unusual tenderness on pressing over the joint below Poupart's ligament. But on pressing the os innominatum towards the sacrum she complained bitterly. The same thing occurred on making pressure upon the last lumbar vertebra and upper part of the sacrum. There was also pain on deep pressure towards the posterior and superior part of the sacro-iliac articulation. Some increase of heat was to be felt in this neighbourhood by placing the palm of the hand upon it, and by comparing the temperature of the corresponding parts on the opposite side. Thus the case was made out to be disease between the lower lumbar vertebra, sacrum, and ilium. On seeking for a cause of this local disease, (it only came out upon subsequent inquiry,) it was remembered that about six weeks before the lameness she had fallen upon the ice, but the fall produced no urgent symptom beyond temporary lameness. Spine disease seldom manifests itself only on one side in children, so I was disposed to attribute the mischief to the upper part of the sacro-iliac symphysis. The case was to be treated simply by mechanical rest, and the only way of securing rest to these parts is by the patient lying down uninterruptedly. This plan was carried out perfectly. The constitutional disturbance subsided in a fortnight. In two months, in direct opposition to my previous strongly-expressed wishes, (as she appeared to be in every respect so well,) she was allowed by her parents to get up and walk about, and soon afterwards unmeasured exercise was taken.

In a few weeks the lameness and all the other untoward symptoms were again apparent, with occasional shivering. These symptoms continued uncontrolled, and she was allowed to be moving about the house until she was brought to me in the early part of June, 1860. She was then accompanied by the family surgeon, who said he was excessively sorry to see these nice quiet people, good patients, and so on, so distressed about their poor scrofulous little child, with a diseased spine, and a large abscess forming; adding confidentially to myself, that although the case was utterly hopeless as regards the treatment, still he thought it right to bring the case for me to see, as I had seen it before. An abscess could now be distinctly felt, deeply seated upon the inner and posterior part of the ilium, on its pelvic aspect, near the sacrum and last lumbar vertebra; and there was some increase of heat and abnormal firmness of the surrounding soft parts. A hemlock poultice with bread was ordered to be applied over the abscess, and the recumbent supine position to be again resumed, and continued without intermission. The mother was now willing to carry out this plan of "rest" carefully, and for any extent of time. The child was to take the air daily, weather permitting, in a little four-wheel carriage. The diet was to be good, but not stimulating. It was intended that the patient should go to the seaside for the remainder of the summer, but some domestic circumstances interfered with this arrangement, and she was kept at home in the country. The abscess opened of itself in September, near the posterior part of the crest of the ilium. It broke in the night, and nearly a quart of matter came away, soaking through the blanket and mattress; and abundant pus, serum, shreds of lymph, and more solid scrofulous-looking material were discharged. The health remained good. The abscess gradually ceased to secrete, and I saw the patient in January, 1861, well.

Now observe, this patient is the subject of a second injury. She lies in bed for several months continuously, and her health is actually improved by it. Here is a case strongly supporting the opinion I advanced the other day, that when you have a serious disease disturbing the health it is not true that rest in bed is uncompensated; for here is a child, suffering severely as regards health, kept lying in bed, securing the parts from disturbance, and after seven months' persistent rest in the recumbent position, her health has gradually improved; so that the expression that her health remains perfectly good is not exaggerated. The abscess by degrees ceased to secrete, and when I saw her, in January, 1861 (up to which time she had been lying down), she could stand up and walk without pain. She was fat, plump, and in every respect well, except that there was a little weeping of thin fluid from the mouth of the sinus of the abscess; there was no pain anywhere. The fourth and fifth lumbar vertebræ seem firmly consolidated, and do not yield like the other vertebræ on bending the spine. The discharge ceased in February, 1861, when she was brought to me, at my request; and I thought I might detail her case here last year. She is now, and has been since January, 1861, perfectly well in health. The lower lumbar vertebra projects backwards a little, but not abruptly. She runs about with the other children, up and down stairs, and stoops to pick up anything off the floor. She is now six years and nine months old. Here is a case, then, of diseased spine putting on the symptoms of hip-joint disease, with extensive suppuration. The child was thought to be scrofulous by both parents and by the surgeon in attendance; but, in spite of that, the child is now, I believe, perfectly well, without a drawback. This is a case which I think shows conclusively the value of mechanical rest in the treatment of cases of this kind.*

Severe disease of spine, close to pelvis, cured by "rest."

In the summer of 1851, Miss A—— fell down stairs and bruised her back, in the lumbar region. This was soon followed by pain and some tenderness at the part, as well as some pain in the legs. The pain and weakness in the back increased, with some loss of power in the lower extremities, accompanied by a marked inability to sit up long, or to go up and down stairs, the pain in the legs being very severe. She consulted several London surgeons and physicians, all of whom advised tonic plans of treatment, change of air, exercise, and counter-irritation. One surgeon treated her most energetically for neuralgia. These varied kinds of treatment were pursued with irregularity, and without any benefit to the patient, up to the time when I saw this lady in 1854, nearly three years from the beginning of her symptoms. She was then emaciated and weak, had a frequent and irritating cough, with hectic and distressed facial aspect and rapid pulse, and her health was reported to me as very greatly deteriorated and still going down. She

* Sept. 9th, 1862.—The mother writes to me thus: "You will be pleased to hear that my little daughter is quite well, and has not felt the slightest return of her weakness."

could walk but a very short distance, and that with difficulty. She had pains and cramps, and diminished sensibility in both legs, and she could not stand upright without support; both legs were somewhat wasted. The fourth and fifth lumbar vertebræ were painful on pressure and slightly projecting backwards; pressure upon them producing a severe pricking sensation down the left leg, in the course of the branches of the anterior crural nerve. Deep in the loin on the right side the fluctuation of an abscess could be detected, extending towards the crest of the right ilium. The abscess was opened; her health gave way, and she really appeared to be on the very verge of the grave. I then had her placed on one of Alderman's beds, and removed in an invalid carriage to Brighton. She remained on the couch uninterruptedly, never quitting it, except for the purposes of personal cleanliness, during five months, and then she was lifted horizontally off the bed on to a couch or sofa, and put back when the bed was ready for her. Her health gradually and quickly improved; and at the expiration of a few months all the pain in both legs, and the pricking sensation in the left, had disappeared, and both legs were improved in size and power. She continued recumbent until the discharge had ceased, and all the wounds had healed. At the expiration of fifteen months she could stand upright without pain, and, after a few days, with confidence in herself. Taking walking exercise with crutches, she gradually got well. She is now, and has been ever since that time, in perfectly good health, with not a single drawback in respect to her condition.

This case, then, shows the value of rest. I am quite confident that had the patient not been compelled to lie down, and had not great care been taken of her, she would have died.

Case of disease between the sacrum and ilium, with intense pain in the leg on the same side of the body.

This case, with which I shall conclude to-day, is of much interest—in one respect especially, because I was enabled by the recognition of the course of the nerves to the leg to ascertain the real character of the case, the true position of the cause of the symptoms, and thence to deduce the proper plan of treatment. The details are not very long.

On November 23rd, 1861, I was requested to see, with Mr. Barnes, of Chelsea, a young gentleman who was suffering, and had been suffering for some considerable time, with intense pain in the calf of his right leg, the thigh slightly flexed, and inability to walk or stand upon the limb. He was sitting upon a couch, the limb every now and then jumping involuntarily, and he crying out with pain. This occurred several times while I was in the room. He had shockingly bad nights. I requested that I might have all the possible details of the history placed before me in anticipation of any personal examination. It appeared that on April 24th, 1860, the lad slipped down two stairs and struck the lower part of his back, but no direct injury was suspected. He soon became lame in the right leg, and in attempting to walk his foot turned somewhat inwards. He continued lame and weak in the right leg for nearly three months, after which time he gradually resumed the natural occupations of his period of life. He had repeated attacks of lameness arising from slight casual accidents. In February, 1861, whilst bowling his hoop, he trod unexpectedly, and with force, upon a stone, and sprained his foot; and from that time he became again very lame, and went about on crutches. In the early part of October, 1861, he had a third slip and fall; and from that time he could not stand or move about without pain in his right leg below the knee, with cramps in the calf of that leg. During six weeks the pain in his leg was fearful day and night, depriving him of sleep, and distressing his general health very much. He was lifted off his bed and carried to the house of a consulting hospital surgeon, who, seeing him suffering from so much pain and tenderness in his leg, which made it almost impossible to examine the limb carefully, from the additional pain and spasm which was induced by it, and finding nothing wrong about the knee or hip-joint, came to the conclusion that probably there might be deep abscess near the back part of the tibia, and that the tibia itself might be diseased; and he directed the treatment to be adapted to such a view of the case, and a belladonna plaster to cover the leg. The night following this visit to the surgeon was passed in a wild agony of awful pain, with cramps and twitching in the right limb. After ten days, there being no alleviation of the severe symptoms, the opinion of another hospital surgeon was sought. He saw the patient in bed, and examined him carefully; but I believe he gave no intelligible or satisfactory opinion as to the cause of the painful symptoms. He directed the patient to be kept quiet on a couch or bed, the knee-joint and leg to be supported by a splint, and the knee to be covered with cotton-wool.

I hope this circumstantial statement will not imply anything like self-laudation. I only mention the facts in detail for the purpose of pointing out the method of proceeding which led to a right interpretation of the symptoms.

No improvement occurring, I was desired to see this suffering patient, and I went to him under the influence and with the forethought of doubtful benefit to be derived from my examination, considering the eminence of the two surgeons who had preceded me, and from whose suggestions no good had been derived. I found a very intelligent lad sitting upon a sofa, with his right leg lying on its outer side, supported by pillows. The pulse quickened with but little febrile excitement; the tongue was not much furred; the thigh slightly flexed, and it could not be straightened without pain; most severe pain in the leg, which was every now and then, at two or three minutes' interval, suddenly and intensely increased so as to make him cry out; the back part of the calf of the leg was very sensitive, both on superficial and deep pressure, the muscles of the part being in a state of sthenic contraction and quivering, but there was no marked increase of temperature at the part, nor any distinct fluctuation. By steady and continued pressure upon the calf of the leg, the pain was not increased, and I thought the spasmodic condition of the muscles seemed to subside.

These local symptoms, with their natural suggestions, excluded anything like local disease in the neighbourhood of the posterior part of the tibia, or within the calf of the leg, where the pain was expressed. The muscles subsided in their spasmodic action, the pain was relieved rather than otherwise by pressure, and there was no increased heat at the part; no pain in the knee or hip-joint when the examination was confined to either of them, nor was there any heat over or near either of them. On pressing the right trochanter major, he experienced pain somewhere in the hip—not in the hip-joint. No attempt was made to put him upon his legs, because he could not bear any weight upon his right leg, and recent experience had shown that the pain had been greatly aggravated by making such an attempt. I thought it was clear that the real pathological cause of the pain was not at the part wherein the pain was expressed, and that there was no local inflammation in the part; for there was not the local indication, or constant concomitant of it—namely, increase of temperature. The nervous supply to the deep and superficial muscles of the leg, and to the overlying skin, being derived from the great sciatic nerve, suggested to my mind the belief that the cause, whatever it might be, would be found anatomically associated with that nerve, to the exclusion of the anterior crural and obturator nerves.

These considerations induced me to examine the structures near to which the great sciatic nerve travels towards its distribution. The patient being gently turned over on to his stomach, I pressed with my thumb upon the junction of the sacrum with the ilium, and near to the last lumbar vertebra, on the right side, and he immediately screamed out that I gave him the pain in his leg. On making a like degree of local pressure on the corresponding part on the opposite side, no pain was induced at the point of pressure or in the leg; by repeating the pressure on the right side the pain in his leg recurred. Thus the real cause seemed to be discovered in the form of disease between the sacrum and ilium, or thereabouts; and the obvious and first remedy was to give rest to the joint, and that could be obtained only by the patient lying, uninterruptedly, flat upon the back, and by the application of a long, straight splint to the leg and pelvis, so as to prevent any disturbance; the recumbent and supine position to be strictly maintained during two months. The splint was applied immediately by Mr. Barnes. He had no medicine—not a drop. The patient was not allowed to turn in his bed, or to sit up for any purpose; and in a fortnight all the painful symptoms had subsided, so that he was quite comfortable in every respect.

I did not see this patient again until the 22nd of January last—two months from my previous visit. I found him happy, free from pain, health and appetite good, complaining only of a little headache from his head being too low. I turned him on to his left side, and examined his right sacro-iliac joint by direct pressure; but it did not produce any pain, either at the part or in the leg. Thus mechanical rest had aided nature to repair the mischief, whatever it might have been. Considering that he had been more or less lame since April, 1860, it seemed unreasonable to suppose that the diseased structure of the sacro-iliac joint could be repaired in so short a time as two months;

hence it was arranged that the same plan of mechanical rest should be persevered in for one or two months longer.

The diagnosis, in this case, was established chiefly through the medium of a recognition of the anatomical course of the great sciatic nerve which supplied the part where the pain and spasm were expressed, and in that respect the case is important and of striking interest. The patient, I am happy to say, is now perfectly well in health, and free from any pain. The intention is that he should lie down till the end of this month.

CASES IN OPERATIVE SURGERY.

WITH CLINICAL REMARKS.

BY ERNEST HART, ESQ.,
SURGEON TO THE WEST LONDON HOSPITAL.

II.

OPHTHALMIC SURGICAL CASES — EXTRACTION OF THE CATARACTOUS LENS BY INFERIOR SECTION; OPERATIONS FOR LUXATION OF THE LENS.

THE operative treatment of cataract by extraction of the opaque lens is a method so far superior in the great majority of adult cases to reclination, drilling, depression, &c., that the chief surgical interest in respect to this disease centres in the various methods of operating by extraction; and there can rarely be any good reason, except the want of the necessary dexterity and practice, for preferring the slower and more dangerous methods of destroying the cataract *in situ* in the eye. I speak of adult cases; it is otherwise with children. The modern practice of extraction has received many considerable improvements; and carried out now with an intelligent adoption of these aids, and with that respect to constitutional peculiarities which we have only learned of late years, and hardly yet perhaps sufficiently learned, its result may, with rare exceptions, be safely prognosticated to be the restoration of the patient's sight. I do not mean that every one who is blind and cataractous will be restored to sight by the extraction of the lens; but that where the blindness depends on the cataract, extraction of the lens is now so safe and perfect an operation, that it is rarely the patient will fail to recover excellent powers of vision.

This result is mainly secured by an attention to certain details, and by a rational and unfettered system of correlative medical treatment. The best results may be achieved by the simplest instruments. The instruments required for extraction now are few and uncomplicated. No retractors of the lids, spring specula, or sickle-shaped knives are necessary: only a triangular knife, curette and needle in one handle, and a small pair of ordinary forceps. The best English are in all respects equal to the best foreign knives. I have recently had opportunities of carefully examining both, and I incline to prefer the work and design of our own makers. The forceps are needed for fixing the eye. The use of these forceps is an important addition to the facilities for extraction. There are a number of ingenious hooks and double hooks used for this purpose; but it has seemed to me desirable to avoid wounding the conjunctiva, and so forming a fresh focus for possible inflammation. I prefer fine dressing forceps with broad points, which will firmly fix the eye, without sharp points or any other contrivance for lacerating the mucous membrane of the globe.

There is one practical question in respect to extraction to which I would refer. It is the choice of the direction of the flap, whether it shall be made upward or downward. My own experience, and the observation of a long series of cases in the practice of my friend, Mr. White Cooper, prompt me to speak much more favourably of the inferior section than do some of our classical writers on ophthalmic surgery. From the results of a large number of cases of extraction, in rather more than half of which I have operated by the inferior section, I have great reason to be satisfied with that method. In a number of other cases which I have had opportunities of observing, the result has been as good.

It has been objected to the inferior section that the edge of the lower lid is likely to become engaged in the wound, and so to retard union; and that by its position, being bathed in the tears of the inferior cul-de-sac of the mucous membrane, the healing of the cicatrix must suffer from that contact. I believe both these objections to be partly fanciful, and that they are not fully borne out in practice. I have never seen more rapid union than in the cases of inferior section, and the excellence of the ultimate result is greatly aided by the more favourable conditions which it offers for executing the operation to perfection. In employing the superior section, there are difficulties inherent to that method. These occur especially in the second and third stages of the operation. After the section has been made and the eye released, the ball turns upward under the lid so as to bury the incision, and the introduction of the cystitome, the expulsion of the lens, and the perfect clearing of the pupil are all infinitely more difficult than in the lower section. Practice teaches how to overcome these difficulties; but I am persuaded that the greater facility with which the pupil may be cleared and the parts adjusted has the effect of producing more perfect results from that operation. The accidents of operation—and in these I include wounding the iris, effusion of blood into the anterior chamber, difficulty in extracting the crystalline lens, incomplete incision of the capsule, declension of the lens into the vitreous humour—may be almost wholly excluded from operation by the inferior section. By my own experience I am led to similar conclusions in respect to prolapse of the iris and synechia—two of the most troublesome accidents so far as the after-consequences are concerned. In one or two patients I have operated with the same degree of care by the inferior section on the one eye and by the superior section on the other, and the result has confirmed a preference for the former method. Thus in Catherine B——, who was lately under operation at the West London Hospital, the result on the left eye (inferior keratotomy) was perfect; in the right (superior keratotomy) the iris is adherent to the corneal cicatrix. The same has happened in two other of my cases lately. I know no more beautiful, simple, and successful operation than extraction by the lower flap.

The perfection of this result is greatly facilitated by a complete liberation of reason in treating the patient medically. Comparatively recent tables have been constructed to show the relative success of operations conducted with or without depletion, and accompanied by given dietaries and plans of treatment. This is a sacrifice to one of the medical "idols of the cave." I mistrust the success of any definite system, but look for guidance to the condition of the patient, and treat the case as one of simple wound of the eye. Sometimes low diet is required, sometimes brandy and meat, colchicum, or bark and soda. The less fettered the treatment by any system, the more perfectly and rapidly the wound heals and the patient recovers. In the same way I have been led to discontinue the use of wet rags as a general application. If the object be to permanently lower the temperature of the eye, that requires a greater amount of attention than is commonly given, or than is often agreeable to the patient. The wet clothing of the cheek seems to me to favour rheumatic and erysipelatous inflammation—two evils greatly to be dreaded and carefully to be averted; and alternations of temperature, by applying wet rags and then allowing them to dry, are more likely, I think, to be injurious than beneficial. Occasional bathing with tepid water and a soft eye-sponge, to prevent accumulation of discharges, appears to me to be all that is commonly useful or desirable. The room being darkened, the eye thoroughly shaded, and the lid closed, the less dressing the better in most cases.

The advantages of extraction in normal cataract are most strongly apparent also in luxation of the lens. This is a rule which seems to me hardly to admit of exception. I have seen lately one or two cases which forcibly illustrate it. In one case a patient applied to me for some other ailment, in whose eye I observed that the lens was dislocated into the anterior chamber. I remarked upon the fact to him, and examined the eye. As seen in the annexed drawing from life by M. Clèrevaux, the lens was lying against the cornea; it was densely opaque, and had lain there so long that it had undergone calcific change, and was the seat of considerable chalky deposit. This was the result of a blow on the forehead some years before. He said that he suffered no pain or inconvenience from this abnormal condition, and would not hear of any operative interference. Two months since I saw this patient again: he had suddenly, and without any cause of which he was cognisant, been seized with acute inflammation of the ball; suppuration of the globe

had occurred; the contents had escaped; and after much suffering, the result was destruction of the organ.

In another case of spontaneous dislocation of the lens, I went, by appointment with Mr. Flower, of the Royal College of Surgeons, then one of my colleagues at the North London Eye Infirmary, in order to remove the lens, when the patient's courage suddenly failed him, and he decided to leave matters as they were. This case has recently ended in the same way as the above.

Extraction of the dislocated lens is the remedy which in nearly all cases affords the best relief for the patient, leaving him commonly with good useful vision.

In the case of which I here give a drawing, I was induced, however, by particular circumstances, to adopt a different course, with good results. This boy had received a blow across the eye; the cornea had been cut; the iris prolapsed into the wound, and the lens luxated. Subsequently, the wound having healed, the iris was adherent to the cicatrix, and also posteriorly to the opaque lens, which was dislocated into the posterior chamber. If I had seen the boy in the first instance, I should

have at once extracted the lens through the corneal wound, (enlarging the section, if necessary,) and reduced the iris, thus transforming the case into an irregular kind of keratotomy for cataract. In the later stage there were difficulties, obviously enough, which stood in the way of successful extraction, and looking to the age of the patient, I decided on breaking up the lens by needles; for at this age the lens may be much more freely manipulated, absorption is more certain and rapid, and inflammatory sequelæ less common than in adults. Operation through the cornea was contra-indicated by the traumatic obliteration of the anterior chamber. I introduced the needles through the sclerotic, and after two sittings the desired object was successfully completed. The boy's sight is pretty fair, and in time will be good.

Wimpole-street, Cavendish-square, Oct. 1862.

ON INTERMITTENT FEVER.

By JOHN GASON, A.B., M.D.

In the following observations will be found a description of intermittent fever engendered in malarious districts, and which prevails to a considerable degree in the Papal States during the months of July, August, September, and October. No period of the year, however, is exempt from it, as it frequently attacks visitors to this locality even during the winter months. The comparative exemption of Italians from intermittent fever during the cold months of the year is probably ascribable to the precautions they adopt on the approach of cold, and which they continue until warm weather has fully set in. In giving a brief sketch of this fever, which occurs in Rome, and which has been erroneously called Roman Fever, as if it were peculiar to that country, I shall make some observations on it which a close examination of the disease has enabled me to do. I shall also give some interesting cases which have been under my immediate care, and which will elucidate in some points its nature.

The most recent and unbiassed investigations leave no doubt on my mind of intermittent fever being a specific affection of the nervous system. It is found in various forms, and from the interval of intermission between one attack and another, has received the appellations of quotidian, tertian, quartan, &c. In a case of simple quotidian the fit comes on at the same hour every day. In the simple tertian, there is a complete cessation of fever for one whole day in addition to a portion of the two days when it comes on and when it terminates, which in medical nomenclature constitutes three days. To explain myself: an individual may be attacked at twelve o'clock noon on one day, the disease having gone through the three stages before six P.M. of the same day. The interval between this and midnight is counted one day. The following day the individual will be free from fever, and the interval which elapses before the return of the fit at the same hour on the succeeding day constitutes the third day. In the quartan there are two whole days' freedom from fever, in addition to those in which it comes on and when it subsides. The remarkable regularity of intermittent fever is worthy of note. An interesting case of this has been given by the late Dr. Graves in the *Dublin Quarterly Journal of Medicine* for Feb. 1846, in which he says that "the law regulating the periodicity of agues applies not only to the succession of paroxysms, but is extended to the intervals between them." His deductions were drawn from the course of a quartan ague which extended over a term of twenty-seven months. The same thing has been noted by various writers on the subject.

There is a class of intermittent fever in which the fit returns two or even three times during the period to which that form belongs, and is accordingly named double or treble quotidian, tertian, &c., as the case may be. This circumstance, by curtailing the period of intermission, occupies almost the whole interval, and adds considerably to the danger of the case. In a not uncommon form of this fever, though of a tertian type, the fit may return every day, and resemble, in its hour of invasion, in severity, and in form, that fit with which it corresponds. To take a case of double tertian for an example: the symptoms of the third fit may resemble in all particulars those of the first, and the fourth those of the second. In one of the cases which I shall give hereafter it will be seen that the first and third fits commenced at eleven o'clock A.M., their type being of a very severe character; while the second and fourth came on at two A.M., but were much milder than the alternate ones. These various forms may change their hours of attack, either by anticipation and curtailing the length of intermission, which constitutes a very serious form, or by coming on later, thus lengthening the period of intermission, and by this means wearing themselves out, and the patient recovering.

There is also another form of intermittent fever, in which the period of intermission is so badly marked that it requires considerable discrimination and acquaintance with the disease to recognise it. It almost assumes the form of continued fever, from which, however, it is perfectly distinct, requiring the same mode of treatment as does the most simple form of intermittent fever, with the addition, however, of treatment directed to the organ which may be affected. Organic disease of some of the viscera of the three cavities not unfrequently accompanies this form, and the fever which, as it were, fills up the intervals may be the consequence of internal disease of an acute or chronic character.

Each of these forms may, however, be seriously aggravated by the addition of pernicious symptoms constituting what is called pernicious intermittent fever. This description of fever prevails more in some years than in others. The symptoms I shall speak of further on; they give a character to the disease which, if not recognised at an early period, may rapidly terminate fatally. Many are carried off by the second attack, but they seldom pass a fourth.

Causes.—Two general causes may almost always be traced in every disease—the remote, and proximate or exciting,

Though distinct, they may follow so closely as to be barely distinguishable, or they may occur at a date considerably distant the one from the other. In few cases, however, will an attentive examination fail in recognising these two sources of disease. In many this will form so important an element of observation that on a correct appreciation of them will depend the treatment necessary for the subjugation of the disease. In none probably more than that which forms the subject-matter of this paper will the necessity of distinguishing these two main causes be more needful.

The theories of the nature of the remote cause of malarious diseases are so numerous, so discordant, and so unsatisfactory, that even to allude to them in such a paper as this would take up more space than I feel myself entitled to. I may, however, in a future paper on the same subject allude to them, and at the same time give some reflections which a lengthened sojourn in this climate has enabled me to make.

Each individual coming into, or residing in, malarious districts, appears to absorb a something which renders him susceptible of intermittent attacks under various exciting causes. There appears, however, to be a greater power of resistance to this malarious influence in some individuals than in others; for under the same circumstances and at the same time one person may be attacked by intermittent fever, while another may be seized by continued fever without any symptom of intermission manifesting itself during its course. It would appear that this malarious influence first affects the nervous system, but in what peculiar way is still wrapped in mystery.

The proximate or immediately exciting causes I shall divide into the mental, material, and atmospheric.

Among the principal mental causes may be enumerated, excess of the emotions, as anger, grief, anxiety, &c.; the depressing animal passions, excessive pain, &c.

The material causes are, improper food, intemperance, an excess or want of food, over-fatigue, childbirth, fever, &c.

The atmospheric causes are, exhalations from stagnant waters; exposure to the rays of a powerful sun; transitions from a dry to a warm, moist state of the atmosphere; exposure to strong winds, either in malarious districts or where they may be wafted to; subjecting the body to chill when heated; residing in chilly, damp dwellings, or exposure to a cold damp draught when the body is in a state of perspiration; sitting or lying for any length of time in the open air if the body is at all heated. These two latter are amongst the most frequent causes of the disease among visitors to Rome. Taking cold drinks when in a state of perspiration, sleeping at night with open windows, &c., are also frequent causes of the disease.

It has been supposed that animal and vegetable matter in a state of decomposition has much influence in the production of this fever; but it admits of very great doubt, for it is a fact worthy of remark, that the miasma arising from animal or vegetable matter in a decomposing state is very much less in Rome (for instance), where this disease is so frequently met with, than in more northern latitudes. The desiccation of dead animals is so rapid in Italy that but very slight effluvium proceeds from them, and there are many parts of Italy where intermittent fever is hardly known. Besides, the regular cleaning of the streets in Rome, which has been introduced by French influence, has had no effect in lessening the amount of the disease. That portion of Rome, the Ghetto, inhabited by the Jews, which is proverbially the dirtiest part, and where in the court-yards of the houses are heaps of decomposing animal and vegetable matter, there does not appear to be so much of the disease as in some of the cleanest parts.

It is generally believed by the Italians that alternations of dry heat to damp cool weather, particularly after a continuance of the former, is one of the most pregnant causes. After a long continuance of hot dry weather, (which generally takes place during the months of July and August,) the ground cracks in various places, and should rain ensue in these months, and be succeeded by heat, it is supposed that some exhalation takes place through the fissures, and is a very powerful exciting cause of the disease; but whether the ague is caused by the transition from heat to damp coolness, or by the exhalation of some sub-terrestrial poison, is still a matter of doubt. True it is that the shepherds or the agricultural labourers (who come during these months from mountain districts, and who prefer sleeping on the ground during the hot nights of summer to sleeping in close sheds which are built for them) are the principal sufferers from attacks of pernicious fever, which would seem to favour the idea of its being produced by subterranean exhalations. These persons are, however, from their laborious occupation and meagre fare, more subject than others to the malign influence of atmospheric changes.

In speaking of the mental causes of intermittent fever, I have purposely omitted exuberance of joy, &c. It is believed by some eminent writers on this disease that, as it is of a low type, exalted feelings can have no power in producing it. Not being able to say that I can distinctly trace a connexion between those feelings as cause and effect, I have preferred merely alluding to it here to giving it as a decided cause of the disease.

Symptoms.—The length of time which may elapse between the exposure of an individual to the remote cause of ague and to its development is very uncertain. It may not, however, appear for several months, even after the individual has left a malarious district—a fact which should be borne in mind in the treatment of symptoms of this nature. Simple intermittent fever is generally recognised without much difficulty. A feeling of indisposition is usually experienced for some hours before the attack begins, but frequently not sufficient to attract much attention in the subject of it. Three well-marked stages are the usual course of the disease. These are named in order, the cold, the hot, and the sweating stages. Space will not allow of my doing more than to briefly allude to them. The first or the cold stage is accompanied by an intense feeling of cold, the teeth chatter, the blood recedes from the surface, and various uneasy sensations pervade the head, chest, and abdomen; and, in fact, the patient feels as if he would never get warm again. This stage may continue from one to six hours, gradually terminating in the hot stage. During this stage the skin becomes intensely hot and burning, the head feels heavy, and is accompanied frequently by a tight sensation across the base of the brain, noise in the ears, and smarting of the eyes; the breathing becomes laboured and oppressed, and a general feeling of distress exists throughout the whole system. In fact, the sufferer feels as if he would never grow cool. This state may continue from two to six hours, gradually terminating in moisture of the skin, which ushers in the third and last, the sweating, stage, the severity and duration of which will generally be found to depend on the severity of the previous stages, on the strength of constitution of the individual, and on the means used to promote it. This stage may continue from one to three hours in favourable cases, or it may be much longer or shorter, as will be seen hereafter.

There is, however, another form, in which the usual symptoms are found mixed up with those of organic disease of some of the viscera which may embarrass the diagnosis. It will require frequently much experience and observation on the part of the physician to recognise this form. But some signs, if rightly used, will assist in the solution of the difficulty. They are, the history of the case, the course and nature of the disease with which the intermittent fever is found associated, and the effect produced by treatment.

To illustrate what I mean by a not unusual case. An individual labouring under some organic disease, accompanied by a certain amount of fever, and residing or having spent some time in a malarious district, is attacked, after some increased indisposition, by a set of unusual uneasy feelings, which at the first may be imputed to some increase of his disorder. Means may be adopted for the subjugation of these new symptoms, which subside after the course of some hours; however, without sufficient cause, after the lapse of a certain time and generally at the same hour, a return takes place of all the new uneasy feelings, which again apparently yield to the means employed. These symptoms may with tolerable certainty be considered as the result of the disease which I am now describing; and this probability will almost amount to certainty if they yield to the administration of bark or quinine in suitable doses.

Intermittent fever is frequently found attended with more formidable symptoms than any of the forms which I have before alluded to, and, from the severity of the disease, has received the name of pernicious intermittent fever. The symptoms may be classed under those of the skin, brain, chest, and abdomen. They may be distinct, or one or more of these classes may be found united. Symptoms of pernicious fever may set in from the very commencement, which, fortunately, is of rare occurrence; but they manifest themselves most frequently after the accession of one or two comparatively mild fits. They prevail much more frequently and more severely in some years than in others. When the skin is the part affected, they are observed under two forms—those of excessive perspiration and those of extreme cold. When perspiratory symptoms prevail, we find nothing unusual beyond a very long continuance and excessive amount of this symptom, which may continue from ten to fourteen hours. The effect of this long-continued perspiration will be readily appreciated by the consideration that pernicious fever is, generally speaking, of the

double tertian type, and the frequent return of the sweating stage quickly reduces the powers of life.

In that form accompanied by extreme coldness of the skin, the nervous power becomes so paralysed that the most powerful stimulants or irritants fail in removing this symptom. This is probably one of the most fatal forms of the disease: it is one under which patients sink very rapidly. The skin, and particularly so that of the extremities, becomes icy cold to the touch. The sufferer may not be aware of it unless his hand is brought into contact with some warmer portion of the body, as the chest or abdomen, when he feels the contrast. Pain is generally complained of in the region of the abdomen; but the features rarely indicate the existence of it. The pulse becomes very small and quick, the eyes sunken in their sockets, and the heart's action soon ceases. This form of pernicious intermittent fever, in common with that last described, is but rarely witnessed in the first fit; symptoms, however, in a modified form, present themselves in the second; and they but rarely pass a third.

Symptoms of cerebral complication are but seldom seen in a very aggravated form previous to the second fit, although a close observer will readily discern unmistakable signs of the approaching severity of the attack even on the first access. They may be present in various forms—viz., stupor, somnolency, stupidity, pain or weight in the head, great excitability, mania, giddiness in the head, loss of memory, loss of sight, fixed pain in one portion of the head, paralysis more or less complete; together with one or more of these, there is a small quick pulse, dry tongue, difficulty in swallowing, &c. These symptoms, when appearing for the first time, generally come on towards the termination of the cold stage, and abate in intensity when the fever subsides. In many cases, however, though a perceptible abatement of fever takes place, still the coma or the cerebral complication may continue, which, on the accession of the next fit, becomes very much increased, and which, if not modified, will in all probability terminate rapidly.

When the thorax is the seat of the complication, we may find a state of congestion of the pleura, substance of the lungs, or of the bronchial tubes, in various degrees of intensity. I have witnessed, during this winter, a strong man seized with an incessant fit of coughing, which, commencing towards the termination of the cold stage, lasted through the hot, and was only relieved by the sweating stage. That inflammation is not the cause of the various signs, may be judged of by the suddenness of the invasion, the rapid subsidence of the attack on the occurrence of the sweating stage, as well as by the effect produced by the specific treatment.

When abdominal symptoms predominate, there may be repeated severe vomitings, cramps in the bowels, and incessant diarrhœa or dysentery. What has been said of the symptoms of chest complication will hold equally good in those of affections of the bowels.

It must be recollected that it is not at all necessary for the constitution of a pure case of simple or pernicious intermittent fever that there should be any distinct fit of shivering; suffice it, that at or about the same hour some symptom (and it may not always be the same) takes place which may not always be perceptible to the patient, and may only be ascertained by the physician or person in attendance closely watching the case. In many cases the three usual stages may be wanting, and we may have nothing to point out its formidable nature more than a periodic return of any one symptom attended with fever, and a remission or abatement of that symptom and the accompanying fever.

I should not have entered thus fully into the symptoms of this disease did I not know that many persons carry with them into their own country the seeds of it latent in the system, which may not be developed until after the lapse of several months, and which by the occurrence of symptoms strange to the medical man in attendance, who may not have had experience in diseases occurring in malarious districts, may be led to ascribe them to a cause quite different from that which has originated them. I have known such to be the case.

(To be concluded.)

VACCINATED RECRUITS.—As approximative evidence of the extent to which the population of this country are protected from small pox, it may be mentioned that of the recruits received in 1860, in England, 747 in 1000 bore marks of vaccination, 790 in Scotland, and 816 in Ireland. The number marked with small-pox were 151 in 1000 in England, 102 in Scotland, and 116 in Ireland, leaving wholly unprotected 102 in 1000 in England, 108 in Scotland, and 68 in Ireland.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Proœmium.

KING'S COLLEGE HOSPITAL.

DOUBLE OVARIAN TUMOUR, THE LEFT MULTILOCULAR, WITH ASCITES; OVARIOTOMY; DEATH ON THE TWENTY-FOURTH DAY FROM PELVIC ABSCESS BURSTING INTO THE PERITONEUM; CLINICAL REMARKS.

(Under the care of Mr. FERGUSSON.)

IN some clinical remarks made at the conclusion of the operation in the following case, Mr. Fergusson said the case was peculiar in many respects, but especially so as being the first in which ovariotomy had been performed in King's College Hospital. These operations, he observed, had heretofore been resorted to chiefly in private practice or in small special hospitals. There had been a few, however, in the larger general hospitals, but small in number in comparison with the others. The present case was an example of enormous ovarian tumour, which had attained to a great size during the last few months. Its progress was so rapid, that life would soon have been destroyed, as it was not an instance where tapping would have proved of any service. The patient had been sent up to him by an old pupil, and was most anxious to have an operation performed. He had often been solicited before to do this operation, but he had generally avoided it, probably from the bent of his early studies. In his younger days it was repeatedly performed by Professor Lizars, but somehow or other it had fallen into discredit. Latterly it had attained great notoriety in England and elsewhere. Mr. Spencer Wells, Mr. Baker Brown, and others, had distinguished themselves in this operation, and now it appeared to be generally approved. In the present instance it seemed favourable in some respects, and unfavourable in others. The patient was doomed by this rapidly-growing mass, yet her health was good in all other respects. She was examined carefully by his colleagues, Drs. Farre, Tanner, Meadows, and others, who gave varied opinions as to the amount of adhesions present, and the contents of the tumour in the pelvis. At the twelfth hour, he might say, Mr. Wells came into the theatre and examined the patient, and he was uncertain as to the amount of adhesions. There was the general impression that there might be extensive adhesions present within the pelvis, which might interfere with extraction. But from all Mr. Fergusson could observe, the experience of the various gentlemen went to show that it was difficult to say to what extent adhesions were present, and the surgeon must just take his chance of finding them or not.

The operation was next described, when it was observed, that to his astonishment and satisfaction, no adhesions were discovered. The tumour was tapped several times, but no fluid came away. After it was removed, another growth, of the size of a cocoa nut, was found, which no doubt was the cause, Mr. Fergusson remarked in conclusion, of the difficulty in detecting the nature of the swelling at first.

For the following notes we are indebted to Mr. Wm. Fairlie Clarke, house-surgeon to the hospital:—

Mary E—— was admitted July 8th, 1862, aged nineteen, unmarried, living in a village of Essex, where she was employed in weaving. She has always had good health, but she looks pale, and at least five years older than she is. She has only menstruated twice.

In November, 1861, she began first to suffer pain in the right iliac region, and soon afterwards she noticed a swelling in that situation, which has gone on gradually increasing in size. At the same time the pain which had existed at first ceased. About the end of November she found it necessary to give up work, and by Christmas the swelling had become less. About

this time her health began to fail; she lost her appetite, grew weak, and fell into low spirits. However, she again resumed her work, and continued at it until about March, when, on account of the increasing size of the tumour, she was again obliged to give it up. She now began to feel pain in the left side. From this time until the present the swelling has gone on increasing in size. She has never been tapped, nor have any other remedies been employed.

Her abdomen is greatly distended, so much so that she looks like a woman at the full time of pregnancy. The swelling is almost symmetrical. On the left side it is rather more prominent than on the right in some places; in others it is soft and fluctuating, which leads to the supposition that it is composed of several cysts, with thick, solid partitions between them. The abdomen measures thirty-five inches in circumference. She is pale and thin, but makes no complaint of pain. Her respiration is easy. There is no dropsy of the legs. She was ordered fifteen drops of muriated tincture of iron three times a day.

Aug. 7th.—The tumour, since her admission, has increased in size considerably. The circumference of the abdomen is now forty-three inches and a half. The patient is cheerful. Appetite fair; sleeps well. Her respiration is now getting embarrassed by the upward pressure of the tumour, and she seems thinner than she was.

On the 9th she was taken to the operating-theatre, and placed under the influence of chloroform, to undergo ovariotomy. Mr. Fergusson commenced the operation by making an incision, about two inches in length, in the middle line, above the umbilicus, from which a quantity of serous fluid escaped. The operator then passed his fingers into the opening, and ascertained that there were no adhesions as far as his fingers would reach. The incision was now cautiously lengthened, both upwards and downwards, by means of a curved, probe pointed bistoury, making it about six or seven inches in length, and again a large quantity of serous fluid escaped. Mr. Fergusson next passed his hand into the abdominal cavity, and found that there were no adhesions whatever. One of the cysts composing the tumour was then punctured with a large trocar, but only a little fluid escaped, and the same occurred when punctures were made in other situations. The contents of the cysts appeared to be of a gelatinous consistence, and the size of the mass was but slightly reduced by these attempts to tap it. Mr. Fergusson now turned out the tumour from the abdomen, and had it supported by assistants. By this means the pedicle was exposed, and it was found to be comparatively small, being only about the thickness of three fingers, and about four inches in length. Through the middle of the pedicle the operator passed a long straight needle set in a handle, and then arming it with a stout double silver wire, he withdrew it, and endeavoured to strangulate the pedicle in two lateral halves; but finding the wire did not answer the purpose effectually, he removed it, and repeated the process with whipcord. A second ligature was then passed entirely around the pedicle immediately below the former one, and drawn as tight as possible. The tumour was then cut off close to the ligatures. A second tumour, much smaller than the first, was now observed lying in the right iliac fossa. It consisted of a single cyst of a bluish colour, and full of fluid. It was attached by a pedicle two or three inches in length, and about the thickness of the thumb. This was ligatured in two halves in the same way as the other, and the tumour cut off. The larger tumour weighed fifteen pounds and three-quarters, the smaller one exactly two pounds. The cavity of the abdomen was then carefully sponged, so as to remove the fluid which had collected there. The edges of the wound were then brought together, and united by silk sutures, the pedicles being left in the abdominal cavity, and the ligatures brought out at the lower end of the wound. Pads of lint were applied along the edges of the incision, and a bandage around the belly. On being removed to her bed the patient's pulse was 140. She complained of slight smarting pain in the seat of the incision. Ordered half a grain of morphia, and brandy was given at intervals.—Nine P.M.: Pulse 150. She throws up the brandy and all that is given her. Ordered to suck ice constantly, and to take another dose of the morphia.

Aug. 10th.—Pulse 130; she slept tolerably well last night; complains of no pain; tongue clean; bowels not been opened; seems very thirsty; passes her urine without difficulty. Since the operation she has been taking half an ounce of brandy every hour. Her diet consists chiefly of beef tea, bread, and eggs, with lemonade to allay thirst. Vomiting still continues at intervals. In the evening she was ordered half a grain of morphia, the dose to be repeated in the morning.

11th.—Passed a comfortable night; pulse 120. Ordered twenty drops of tincture of opium every three hours. She continues very thirsty, and as she craved for beer, she was allowed to have a glass in the evening. The allowance of brandy was reduced to ten ounces in twenty-four hours.

12th.—Pulse 136; bowels have not acted since the operation. She complains of a little smarting pain in the wound, but she can bear moderate pressure on the abdomen. Tongue rather brown and dry. In the afternoon Mr. Fergusson took out the sutures.

13th.—Pulse 126; she has had a very comfortable night she is still sick occasionally; her lips are rather dry, and her tongue slightly brown at the edges; there is a thin discharge from the lower end of the wound. Ordered a draught containing three minims of hydrocyanic acid and twenty drops of tincture of opium every three hours. The sickness is not attended with any pain. She continues to suck ice constantly.

14th.—Pulse 130. Last night her bowels were opened for the first time since the operation. There is no pain on pressing the abdomen; the greater part of the wound has healed by the first intention; sickness continues; she vomits three or four times a day; sucks ice almost constantly; tongue dry and rather brown. In the afternoon her bowels were slightly moved again.

15th.—The bowels have been moved during the night; indeed there is a tendency to diarrhœa. The half-pint of beer which she was ordered every day is to be discontinued. Occasional vomiting; tongue brown and dry. In the afternoon her bowels acted again; she was then ordered a draught containing ten minims of tincture of krameria and one ounce of decoction of hæmatoxylon after every liquid stool. Some aphthous spots have appeared on the tongue.

16th.—Bowels not been opened since yesterday afternoon; tongue still brown; complains of a little pain in the abdomen. There is no discharge from the wound. Pulse 130. She seems thinner and weaker than she was two days ago. Her legs and feet are rather œdematous. The wound dressed as before, and her medicine was changed for a draught containing twenty drops of tincture of opium, one grain of quinine, and five drops of dilute sulphuric acid, three times a day; an enema was also ordered—five grains of quinine to be mixed with four ounces of beef-tea—to be repeated every two hours. There are more aphthous spots on the lips and tongue.

17th.—Pulse 138. Her bowels were slightly opened this morning. The injections have all been retained.

18th.—Last night the house-surgeon was called up, as the patient seemed to be sinking. Pulse 160, very faint and fluttering; respiration slow and feeble; skin cold and moist. Stimulants were given, and she improved. In the morning she seemed better.

19th.—Pulse 110. Bowels not been moved since yesterday morning. To day one of the whipcord ligatures came away. A quantity of foul discharge was squeezed from the wound.

20th.—The upper part of the wound is quite healed, only an inch of the lower end remaining open. This is dressed three times a day, the discharge being free and offensive.

21st.—The remaining ligatures have come away, the discharge has improved in character, the tongue is becoming cleaner, and the aphthous spots are disappearing.

23rd.—Pulse 95. There are still some aphthous spots on the tongue and lips. She seems to be gaining strength; makes no complaint of pain; appetite improving; sleeps well.

24th.—Last night her bowels were moved twice, with a tendency to diarrhœa. The wound continues to be dressed three times a day. There is a good deal of discharge of a healthy character.

26th.—This morning, at half past nine, an unfavourable change took place. The house-surgeon was called to her suddenly, and found her in great pain, with an anxious expression of countenance. Her face was of a dull, leaden hue. The surface of the body was cold and clammy. The chest and belly were covered with sudamina. The abdomen was distended and tympanitic. Pulse feeble and fluttering. These symptoms came on quite suddenly. She slept well in the night, and appeared to be in her usual health at eight o'clock A.M. Stimulants, &c, were given, and everything was done to ward off the symptoms of collapse, but without avail, and she died at three o'clock P.M.

Autopsy, twenty-four hours after death.—The intestines were found matted together and to the walls of the abdomen. The whole length of the intestine was carefully examined, but no perforation was found. The two pedicles were healthy in appearance, as if they were granulating. The small intestine contained a little yellowish fluid. The large intestine was found

perfectly empty, and distended with flatus. The uterus was small, hard, and contracted. In the cellular tissue, at the back of the pelvis, between the rectum and uterus, was a large abscess, which contained about two pints of pus, and which had burst by a small opening, and discharged some of its contents into the peritoneal cavity.

GUY'S HOSPITAL.

SIMPLE TUMOURS OF THE BREAST, OR ADENOCELES.

(Under the care of Mr. THOMAS BRYANT.)

WE lay before our readers two admirable examples of the cystic disease of the breast-gland, described by authors as the sero-cystic disease, or cysto-sarcoma, both being varieties of the adenocele tumours.

The first is an example of the disease developed independently of the breast, the gland being simply spread over it by expansion. The second case is a true disease of the gland itself, depending upon obstruction of its ducts, with the development of intra-cystic growths. Both cases have been recently under treatment.

I.—CYSTIC TUMOUR DEVELOPED INDEPENDENTLY OF THE BREAST, WITH FIBRO PLASTIC ELEMENTS, OF TWENTY YEARS' GROWTH; EXCISION AND RECOVERY.

Sarah H——, a married woman aged forty-one, presented herself before Mr. Bryant at Guy's Hospital in March, 1862. She was pale and somewhat delicate in appearance, having suffered severely for some months from irregularity of the catamenia. She married at eighteen years of age, and twenty-two years ago had her last and only child, which was still-born. Shortly after this event she observed a small tumour in her right breast; it was hard and movable, and free from pain except when touched. She thought little about it, and did not seek advice till two years ago, when Mr. Bryant first saw her. A large solid tumour, the size of a fist, was then readily detected, situated behind and quite distinct from the gland tissue; it was quite movable and very firm; an occasional dart of pain at times passed through it, but in other respects the woman was quite well, and sought advice simply on account of the mechanical inconvenience which the tumour caused.

There was little doubt as to its nature, the history and local appearances all pointing towards the opinion that it was a simple mammary glandular tumour. Mr. Bryant advised excision of the growth, but from various domestic reasons the patient was unable to come into Guy's; as a consequence, she disappeared from observation for upwards of two years, and reappeared in March last. During this long interval the tumour had increased immensely; it was at least double its former size, and had so expanded the gland tissue upon its surface that it was quite impossible to separate the one from the other. The nipple was quite flattened, but no discharge from it had ever been observed. The surface of the tumour was irregular and nodular, apparently from the growth of cysts. The axillary glands were quite healthy.

On March 11th Mr. Bryant removed the growth, excising with it the mammary gland and some of the integument. Rapid convalescence followed the operation.

On examining the tumour, its true nature was revealed. It had evidently been developed behind the gland in its own special capsule, the breast itself being expanded over its surface, from which it could readily be separated. It was composed of a large mass of new growth, which microscopically gave all the elements of the fibro-plastic tumour; and this in the centre had softened down, forming a cavity containing a diffluent and broken down structure. This fibro-plastic growth was nodular externally, and had thus given rise to the idea that many cysts had existed upon its surface. On one of its sides a large cyst, with many smaller ones, was very evident, containing arborescent growths of the true adenocele structure, microscopically revealing beautiful examples of the cæcal terminations of the ducts as new formations. The tumour, said Mr. Bryant, formed a good example of that variety of adenocele tumour which is developed independently of the gland tissue, and which is composed of true adenocele growths and fibro-plastic elements; showing at the same time how these two forms of tumour run into one another, and how, as in this case, they may even exist together in the same specimen.

II.—CYSTIC DISEASE OF THE BREAST FROM OBSTRUCTED DUCTS; EXCISION; RECOVERY.

Caroline G——, a widow, aged forty-three, residing at Hackney, was admitted into the hospital on the 2nd of Jan. last. She was a healthy looking woman, and had enjoyed good health; she had given birth to two children, and suckled both, the last having been born twenty years ago. Her attention was first drawn to her right breast by the discharge of a mucilaginous fluid from the right nipple eight years previously; but at this time there was neither pain nor apparent enlargement in the gland. Two years subsequently she first observed an enlargement of the breast about its centre, and shortly afterwards several other small tumours appeared on its outer side. At this time pain also was first experienced; this was not, however, constant, and was of a shooting nature; it appeared mainly to depend upon the presence or absence of the discharge from the nipple, increasing with the diminution of the discharge and diminishing with the increase. For six years the tumours steadily increased in size till they formed one large mass, about the size of a cocoa nut. The nipple gradually flattened, and at last retracted, pain being of the same nature all through.

When first coming under observation, a large tumour was very evident, situated in the right breast. It appeared entirely to involve the gland, and to be formed by it. It was nodular in shape, containing evidently many cysts, and a bloody fluid could be pressed out of the retracted nipple. The tumour was movable, and was not connected with the parts beneath. The axillary glands were also quite free from disease. The skin in parts being so distended as to appear about to burst, Mr. Bryant tapped one or two of the cysts, giving great relief to the pain, and evacuating about an ounce of fluid stained with blood. As an operation was the only resource, on Jan. 14th Mr. Bryant excised the tumour, and speedy convalescence followed.

On examination of the growth, the correctness of the diagnosis previously made was readily confirmed. The disease was evidently situated in the tissue of the gland, and was of a simple nature, well illustrating one of the varieties of the adenocele tumour. It was apparently formed pathologically by a cystic dilatation of the gland ducts, with some intra-cystic growths springing up within the cyst walls. The structure of these intra-cystic growths was such as is found in all simple tumours of this nature,—namely, ill-formed cæcal termination of gland tissue, and the elements of the fibro-plastic tumour. It is undoubtedly an admirable example of that class of tumours first pointed out by Sir Benjamin Brodie as depending upon obstructed lactiferous tubes.

ST. MARY'S HOSPITAL.

CHRONIC HYPERTROPHY OF THE BREAST, SIMULATING MAMMARY TUMOUR; RECOVERY.

(Under the care of Mr. URE.)

T. S——, aged twenty-six, unmarried, servant in a nobleman's family in the country, was admitted into the hospital on the 21st of May. She had a tumour about the size of the fist occupying the left breast. The tumour was irregular to the feel, being in some parts hard, in others soft and elastic. Slight tenderness was experienced on pressure at a spot situate in its axillary margin. In the upper and also in the outer and lower portion there was an obscure feeling of fluctuation, like that conveyed by the presence of cysts. The tumour was freely movable over the pectoral muscle, and not adherent to the skin. The cutaneous veins were dilated, and the nipple was retracted. The tumour was the seat of slight lancinating pain immediately before and during the flow of the catamenia.

The patient was of a spare make, of a nervous temperament, but of a healthy florid complexion. Her general health had never been affected, with the exception of a severe attack of cholera three years preceding. The catamenia had always been regular. Three years previously she perceived a little pain and swelling in the breast, which never subsided. About a year before the date of admission she observed the nipple begin to fall in; and nine months later, discovered a solid substance in the breast towards its axillary border, just where the tenderness above mentioned was felt. The swelling had made rapid progress since that period. About a fortnight before her coming to town a gland in the axilla began to enlarge, and could be distinctly felt.

May 25th.—After a careful examination of the tumour, Mr. Ure introduced an exploring trocar through the tender part

above described for nearly an inch and a half in a slanting direction, in the belief that there was matter deeply seated. On withdrawing the stilet, out came a drop of pus. He then enlarged the aperture with a narrow bistoury, and gave egress to about two drachms of purulent matter. The discharge continued up to the 30th of May, by which time the mammary swelling had materially decreased. She did not complain of pain, but there was still considerable hardness in the outer half of the breast.

On June 3rd, the opening having healed, she was directed to use a stimulant embrocation; and on the 14th, as there were still some indurated nodules to be felt in the breast, she was ordered to take an iodine mixture internally. Under the above treatment all remains of the chronic hypertrophy of the mammary gland subsided, and she left the hospital perfectly cured on the 10th of July.

This patient came to town in an anxious state of mind, believing her disease to be of that serious nature in which no remedy would be of service except removal of the part by surgical operation. There were some points, no doubt, of a suspicious character. There was the irregular nodulated swelling distending the breast; hard in some parts, soft and elastic in others. There was the retracted nipple, the occasional lancinating pain, the enlarged gland in the axilla, and the dilated cutaneous veins. On the other hand, there was the general healthy appearance of the patient; her age (twenty-six years); the indistinct feeling of fluctuation in one or two points; the comparative mobility of the tumour; the fact of its having commenced in the circumference of the mamma; the absence of pain except at the menstrual periods; and no proof of hereditary taint. All these circumstances concurred to favour the conclusion that the affection was of an innocent nature, and as such amenable to ordinary treatment, as indeed the result demonstrated.

WESTMINSTER HOSPITAL.

CHRONIC MAMMARY TUMOUR; SUCCESSFUL REMOVAL.

(Under the care of Mr. CHRISTOPHER HEATH.)

MARIA M——, aged twenty-three, a native of Ipswich, was admitted into Percy ward on the 1st of September, with a tumour of the right breast. She is a single woman, and has always had good health. In April last she noticed a small lump in the right breast, which has grown gradually larger, but without giving any pain. She had had medical advice, and had taken iodide of potassium.

On admission, there was a tumour of the size of a goose-egg immediately beneath the nipple, which was quite healthy. The skin was readily movable over the growth, and there was no enlargement of the glands in the axilla.

Sept. 3rd.—Mr. Heath removed the tumour by an incision immediately below the nipple. It proved to be a lobulated growth, which was carefully dissected from the healthy substance of the breast; and on section it presented the ordinary appearance of the chronic mammary tumour.

Since the operation the patient has done perfectly well, and the wound is healing rapidly.

23rd.—The wound has quite healed, the patient's general health is good, and she left the hospital to-day.

At University College Hospital, in July last, there was a case of tumour of a similar character in the left breast, of the size of a large walnut, which was removed by Mr. Thompson. The patient was a young woman of nineteen, who had had the growth for some years. It presented the well-marked characters of an adenocele, and she made an excellent recovery.

Medical Societies.

MEDICAL SOCIETY OF LONDON.

MONDAY, OCTOBER 13TH, 1862.

DR. SIBSON, F.R.S., PRESIDENT.

A very large number of Fellows and visitors were present.

The PRESIDENT delivered the following

ADDRESS.

Gentlemen,—In opening this session of 1862-63 I intend to make a few remarks on the present position of the medical profession with the public, and on the influence of this and other Medical Societies on the reputation of our profession. An article in the last number of the *Saturday Review* has more immediately induced me to address you on this subject. From that article I quote a few passages:—

"Medicine and its professors have long held sway over the hopes and fears of mankind. The science officially taught in universities and lecture-rooms has over and over again been forced to alter its fundamental principles and its outward practice; yet one half of mankind has continued to look up with unswerving confidence to the authority of the faculty, while the other half has been ever ready to run after the new sectaries who constantly arise to question the doctrine of the schools, and to propound some new remedy for human suffering..... The plain truth is, that people have followed quacks because they have not found in the doctrines or the practice of the regular profession reasonable ground for confidence.....If bleeding, calomel, starving, stimulants, warm rooms, open windows, have each been tried in turn,—and, as it seems, without any marked advantage one over the other in effecting cures,—it was not surprising that sceptics should doubt the inspiration of the oracle whose utterances were found to be so changing.....The doctor, often uncertain of the nature of your disease, was quite ignorant of the cause of it. He had no evidence as to the action of his drug, or even whether it acted at all upon the cause of disease, and lastly he had no certainty that the drug would affect you in the same manner as others who had taken it. The very utmost that he could urge was a belief, more or less probable, that the same drug had been serviceable in cases presumed to be similar.....If science should hereafter gain further insight into the causes of disturbance and the process of restoration, the physician may perchance play a more leading and influential part. As it is, he fills a secondary place; and if he succeeds in averting fresh cause of mischief, and in clearing the way for the curative process which is itself beyond his control, he has fully performed his part."

Carlyle, who notwithstanding his singularities has done more than any living writer to expose "shams," do honour to the truly great, and excite men to do real work, in his remarkable Latter-day Pamphlet on the "Stump Orator," speaks thus of Medicine as a profession: "Medicine—guarded too by preliminary impediments and frightful Medusa-heads of quackery, which deter many generous souls from entering—is of the half-articulate professions, and does not much invite the ardent kinds of ambition. The intellect required for Medicine might be wholly human, and, indeed, should by all rules be; the profession of the Human Healer being radically a sacred one, and connected with the highest priesthoods, or, rather, being itself the outcome and acme of all priesthoods, and divinest conquests of intellect here below. As will appear one day, when men take off their old monastic and ecclesiastic spectacles, and look with eyes again! In essence the physician's task is always heroic, eminently human; but in practice, most unluckily at present, we find it, too, become in good part beaverish; yielding a money result alone. And what of it is not beaverish,—does not that, too, go mainly to ingenious talking, publishing of yourself; a partly human exercise or waste of intellect, and alas! a partly vulpine ditto?—making the once sacred ἰατρός, or Human Healer, more impossible for us than ever."*

It is too true that our profession does not hold that high and influential position in the eyes of the public that it did formerly. Quackery has at all times been resorted to by many; but it has never been so organized and so much in vogue as it is now.

When we find two such able writers and dispassionate men as Mr. Carlyle and the author of the above article in the *Saturday Review* speak of our profession as they do, and that many refined, educated persons desert the profession, and fly to quackery, we are impelled to inquire into the causes of this state of things.

I shall say a few words first as to the causes which are due to the medical profession itself, and then as to those which may be laid to the charge of the public.

Amongst causes due to the medical profession itself may be

* "The Industrialisms are all of silent nature, and some of them are heroic and eminently human; others again we may call unheroic, not eminently human, *beaverish* rather, but still honest: some are even vulpine, altogether inhuman and dishonest. Your born genius must make his choice. 'Gold, so much gold?' and so decides to contract himself into beaverism. This is the beaver career. The beaver intellect, so long as it steadfastly refuses to be vulpine, and answers the tempter pointing out short routes to it with an honest 'No, no,' is truly respectable to me. If, indeed, he could become an *heroic* industrial, and have a life 'eminently human!' But that is not easy at present."

named, the former trust in a great number of medicines, and as a result, their over-use, sometimes to the exclusion of the more important means—diet and regimen; the frequent changes of treatment; the undoubted revolution from a lowering to a sustaining line of practice; the frequent failures of diagnosis evidenced in cases of criminal exposure; the differences of opinion of medical men, often even of those of the most deserved eminence, as expressed in the law courts, and before commissions of lunacy; the occasional habit of one medical man speaking against another to a patient; the practice, unfortunately sanctioned by custom, of the too frequent advertising of medical works in the newspapers; the frequent announcements of new medicines and new plans of treatment, although they have been insufficiently tested; the remarkable general tendency to abandon the old methods of treatment, though based upon practice and observation, and to run after new ones; the unprofessional custom on the part of one or two medical men of advertising secret nostrums; the publication of the advertisements of such nostrums in the medical journals, and the common employment of such secret drugs by the profession.

But while these causes on the part of the profession itself have tended to lower the public estimate of Medicine, a far more important series of causes have operated with the public from their own errors. They have habitually expected too much from the medical man. They see judges give erroneous charges and judgments both as to the facts of the case and the law itself; they see the decisions of one judge upset by a bench of judges; they see politicians honestly holding the most different opinions with regard to public affairs; they see financiers and economists, both political and social, arriving, after careful study, at opposite conclusions; they find teachers differ in the mode of training the young;—and yet in none of these instances do the public for a moment think of reproaching those men—many of them of the highest eminence, the greatest ability, the most perfect integrity.

Again, in all the sciences, while the great body of opinion is fixed as to the main points, most of the new discoveries and advances are causes of dispute between the most distinguished men of science, and proofs that those eminent men held erroneous views until they were corrected by recent researches; and yet who ever thinks of blaming men of science for the exposure of old errors, or for their differences of opinion? nay, who does not join in admiration of the unsparing search after truth which animates this band of fellow-workers? And yet this freedom from censure which is accorded to the judge when in error—to the statesman, the economist, and the man of science, when they differ from each other in opinion, bring to light new discoveries, and root out old errors, is denied by the public to the profession of Medicine. And yet how infinitely more difficult is our pursuit than theirs! They are concerned, on the one hand, with mere human affairs, patent facts, definite laws, established principles; on the other hand, with single sciences—limited to one single branch of inquiry, relating generally to inanimate matter, capable of the most penetrating research. But our science embraces all other sciences; it is the knowledge of the highest, the almost inscrutable laws—the divine laws of life itself, with all their marvellous contexture, their complex intricacy, their myriads of parts, and yet their perfect unity.

"Wie alles sich zum Ganzen webt,
Eins in dem Andern wirkt und lebt."

The all weaves itself into the whole; the one works and lives in the other.

And this applies to the life—the functions of man in health. Let disease seize him, and then how is all that complex harmony rendered still further complex! That difficult machinery deranged, how is the medical man to know with constant precision the seat of the derangement, and the mode of putting it right? And yet if he fail either in the knowledge of disease, or the power of treating it, he is immediately condemned by the public, who are so indulgent to all others. The public, as I said at the opening of this argument, expect from us too much. And why do they do so? Because they are ignorant of the merest rudiments of physiology. But the majority of the public not only distrust the medical profession, who devote themselves with their whole energy to the pursuit of the most difficult of sciences, but they rush into the organized quackery of the day with the most implicit trust. Why is this? It is that they are not only ignorant of physiology, but of the knowledge also of the nature of things, of the great laws of nature, of the necessary chain of cause and effect. They do not feel and know that for any given effect to be produced an adequate cause must be employed. And thus they trust even in the twenty-third dilution of the homœopath—a dilution that, if it were applied to the earth, the sun, and the whole solar system of planets—if these orbs were all broken up and diluted by divisions of a hundred at a time to the twenty-third homœopathic dilution—and if that dilution were placed under the highest power of the microscope, it would be actually invisible!

Unfortunately this ignorance of physiology and of the knowledge of the nature of things is not limited to the uneducated public; it extends to those who have received a high classical education. It thus applies to some of the highest aristocracy, and to some also of the clergy, who are generally themselves the teachers. If such be the teachers, what must be the knowledge of the taught?

Another great error on the part of the public is their estimate that our sole function is the giving of drugs; whereas now, as always, though now more than ever, diet, the management of the sick room, the pursuits of life, the mental habits, change of air and scene, exercise, and all that is comprised under regimen or hygiene, are really more effectual and more employed by us than the giving of drugs. Even the *Saturday Review* speaks only of the administering of medicines.

There are other causes of the popular estimate of our profession due to the errors of the public, but into these I shall not further inquire, but will attempt to answer very briefly the question, Is our profession worthy of this distrust? If the noble rolls of our great dead ones are opened, a long procession of names is brought to view, who, by their high devotion, clear intellect, and searching and laborious pursuit of truth, from the days of Hippocrates to those of Hunter and Laennec, have extended and expanded our knowledge of the laws of life in health and disease, and our power of aiding nature in the restoration of health to those who are suffering from disease. And of those great names during the last two hundred years England can claim many of the greatest. Harvey, Sydenham, and Hunter enjoy the highest places in all countries.

But it may be said, These are your great dead, but where are the living illustrious ones? The answer is, that never since the laws of life in health and disease were studied have there been so many earnest inquirers as in our time, whether here, in Germany, France, or even America. Never has the science of Medicine in all its departments advanced so much as it has done of late years. Our science has every year been becoming more and more of a fixed science. The cross-lights from all other sciences have been brought to our aid, and we can truly say that many of the most important laws of life both in health and disease, and principles of the treatment of disease, have been searched out, and are now established, so that we have a true standing ground from which future solid advances may take place.

If we look at the practical labours of this Society, as contained in our recent "Transactions," and those of the sister Societies, the Pathological, the Medico-Chirurgical, the Royal, the Obstetrical, and Epidemiological; and the circle of societies in the various districts of London—the Hunterian, Harveian, North London, West London, and others,—we feel that everywhere in this metropolis the medical man is helping to add to the common stock of our profession, is quietly labouring in the cause of truth, and in the cause of humanity—for our profession is eminently human.

This work going on everywhere in London is shared by the profession in almost every town in Great Britain, and their unostentatious labours are serving silently and surely the great aims that we all have in view—the earnest investigation of truth, and the advance of the knowledge of our profession.

This our Medical Society—the ancestor of so many flourishing societies—is capable of doing much good and earnest work. Each member of it has his separate field of observation, and has here the opportunity of communicating to his fellow members any important practical observation that he may have made. Such communications will be sifted by the minds of the members, and will in due time take their place in our "Transactions" to enrich the stores of our profession. One great point must be, as heretofore, to observe disease as it is in the patients of to-day—living disease—and the treatment that appears most suitable.

But besides these communications as to living disease, including the epidemics of to day, and the epidemic constitution stamped on diseases, we look also for the display of morbid specimens in connexion with the history of the cases from which such specimens have been obtained. The mere morbid specimens, unless they are connected with the cases during life, are of but little scientific or practical value; viewed in connexion with the cases, they afford the most certain, and there-

fore the most valuable, instruction. It may be truly said of every member who may make an important observation, the communication of which will add to the stock of medical knowledge, that it is the duty of that member to communicate his observation to the Society.

I know that now, as heretofore, you will be animated by the spirit of our great founders, and that you will all join in the earnest pursuit and communication of truth with a view to the advancement of our truly and eminently human profession. By following on this track we shall live down calumny, and shall be doing our part towards placing our profession in a higher position than it has ever yet held in the estimation of the public.

Dr. COCKLE then read a paper

ON ANEURISMAL TUMOURS OF THE NECK.

He stated that he ventured to make aneurisms of the neck the subject of a medical communication for reasons which he mentioned; and he gave the details of a case of aneurism of the neck in a man aged forty-five, who was admitted into the Royal Free Hospital for supposed subclavian aneurism. He had been well up to within six months previously, when a tumour began to form in the neck, which, as it increased, pushed the jaw towards the left side. It consisted of two sacs, over which singularly pure double cardiac sounds were heard without the slightest trace of murmur. Galvanism, ice, &c., were applied. The sac gave way twice, and a third and final rupture proved fatal. The right pupil had been contracted, but resumed its normal size when the sac burst. His diagnosis was, aneurism of the aorta involving the innominata. This proved to be correct, as shown by a careful post-mortem examination made by Mr. Gant, the specimen having been carefully dissected and exhibited to the meeting.

Mr. GANT referred to the interesting fact, overlooked by the author, that on one occasion, on going into the ward, he was told that the tumour had discharged a quantity of water, which he could scarcely believe; but on referring to Erichsen's volume on Aneurism he came across an instance very similar which had occurred to Dr. Wm. Hunter.

Dr. ALTHAUS inquired the mode of the application of the galvanism, the direction of the current, how long it was applied, and the instruments used.

Dr. LEARED had not met with any case so clearly expressing his own views of the causes of the sounds of the heart; and he was pleased the author had adopted his view in regard to the sounds of the circulation through the aneurism—namely, that they were the result of the collision between the column of blood driven by the artery through that of the aneurism in a state of repose.

The PRESIDENT had seen the author's case, and could confirm the correctness of his observations. There was an aneurism of the innominata, but it was not that that went up into the neck; and, so far as he knew, it was almost a unique fact, that the aortic tumour extended up into the neck.

Reviews and Notices of Books.

Guy's Hospital Reports. Edited by SAMUEL WILKS, M.D., and ALFRED POLAND. Third Series: Vol. VIII. pp. 325. London: Churchill.

So long as Guy's Hospital can point to this regular issue of good practical reports, amply illustrated and well printed, it may be somewhat excused for that air of self-laudation which it is generally admitted is one of its characteristics. The officials of the Borough Institution are supposed to believe that there is nobody like unto them—that they constitute, in fact, *la crême de la crême* of hospital society. Absurd as their idea may be, it is nevertheless clear that they can do what the members of no other hospital can,—namely, exhibit a respectable annual testimony of the past year's industry, and its results in the field of practical medicine. For many years, too, has this been the case; and although such names as those of Cooper, Bright, and Addison no longer appear, yet their successors strive to be as practical, as useful, and as diligent as ever. In witness thereof it is again open to the staff of the Borough hospital *monstrari digito* to another issue of their well-known and valuable reports.

The new volume commences with a paper by Dr. Wilks, upon "Disease of the Supra-Renal Capsules, or Morbus Addisonii." The intention of it is to undertake the examination of the additional facts which have been collected since the publication of Dr. Addison's treatise, in order to discover whether they serve to strengthen or weaken the conclusions therein contained. The author's own observations tend to uphold his teacher's argument, and the cases which are brought forward by Dr. Wilks will therefore be found to substantiate the original facts. Twenty-five cases are adduced in illustration of the latter. The author's *resumé* is as follows:—

"If the fact be contemplated, that in so large a number of cases a disease was suspected to exist in a particular part of the body, and that this was found in every case as anticipated, a conclusion is arrived at proving the connexion of the symptoms with that of disease which can admit of no doubt; indeed, it strikes the writer, that more remarkable than any of the phenomena of the disease is the fact that any other conclusion than Addison's can be arrived at concerning it."—p. 62.

Mr. Joseph Towne contributes an elaborate paper, in two sections, concerning the "Stereoscopic Theory of Vision," with observations on the experiments of Professor Wheatstone. The value of the latter depends, of course, mainly upon the question as to whether their results should be referred to mental construction or to structural arrangement. Mr. Wheatstone refers them to the former; Mr. Towne, on the contrary, believes that the results he here details "furnish conclusive evidence that the fusion of two images of unequal magnitude is structural and not mental."

That the stereoscope is most valuable for the purpose of experiment Mr. Towne of course willingly admits; but he doubts whether it can be relied upon as an exponent of the phenomena of ordinary vision, and demurs to the conclusion that there is no distinction between ordinary binocular vision and binocular vision through the stereoscope. Further, he adduces experiments to show that more than one source of fallacy is inherent in the instrument itself. The author, having laid his investigations before the reader, thus concludes:—

"On reviewing the foregoing experiments, we are led to inquire if it be possible to reconcile the results obtained with the stereoscopic theory of vision; and the alternative suggests itself, that either these experiments are not so conclusive as they appear to be, or that the stereoscopic theory of vision is unsustained by stereoscopic results."—p. 96.

Dr. Habershon follows Mr. Towne with "Clinical Notes on some Cases of Disease of the Heart," and "Notes of several Cases in which Podophyllin was used as a Purgative."

"The podophyllin which I have used has probably been a mixture of resinous extracts, and has had a yellowish-brown colour. It appears to be more active than jalap, and when given (as I have generally prescribed it), half a grain to a grain, with one to two grains of extract of henbane, directly after a meal, the bowels have acted efficiently and without pain in about twenty-four hours.....In one instance the nurse gave seven to ten pills, which had become agglutinated together, each one containing a grain of podophyllin. Violent vomiting, profuse watery evacuations, and severe colic of several days' duration, were set up, but no further ill effects followed. In this large dose its action closely resembled a full dose of elaterium."—p. 121.

We have freely employed this agent, and the only drawback—and that is a great one—which we have met with is the *uncertainty* of its action.

"Two Cases of Extra-Uterine Fœtation treated by Abdominal Section" are detailed by Dr. Hicks, who likewise furnishes "Notes on Two Cases of Uterine Polypi." With respect to the propriety of operative interference in the former class of cases, Dr. Hicks remarks:—

"The statistics of the disease have been so far valuable that they have shown that leaving the case to Nature is attended with great risks. Although it is true many cases have recovered after great danger and prolonged suffering, yet, as it is one of the advantages of surgery to judiciously assist Nature rather than leave her to do all the work, we, I think, ought not to

content ourselves to remain as spectators, but to employ active measures when the time for them has arrived, and when it is evident that the danger and pain increase in proportion to the time we wait."—p. 140.

Mr. Bryant continues his Analysis and Review of the Surgical Cases occurring at the Hospital, and details such general conclusions as the clinical data at his command appear to warrant. In previous pages the Surgery of the Nervous, Respiratory, Circulatory, and Digestive Systems has received attention; in the present report, Diseases of the Urinary Organs form the subject of consideration. Mr. Birkett and Mr. Bryant each give a case of "Arrest of Development of the Humerus;" whilst Dr. Gull reports one of "Progressive Atrophy of the Muscles of the Hands," in which enlargement of the ventricle of the spinal cord in the cervical region with atrophy of the grey matter (hydromyelus) existed.

The description of a "Case of remarkable Enlargement of the Nerves" is given by Dr. Moxon. It is much to be regretted that none but negative information could be obtained regarding the functional phenomena of the woman's nervous system during life.

The Curator of the Museum gives an account of some new wax models lately added to the admirable collection at Guy's. One of these models illustrates a form of disease of which we ourselves have hitherto been quite ignorant, and concerning which the majority of our readers will not be much wiser. This is a "disease of the skin produced by post mortem examinations, or Verruca necrogenica."

"As a rule, the morbid change is a slow one, and commences without any evident breach of surface, the parts affected being not those liable to pustules, as the back of the hand or wrist, but the knuckles and joints of the fingers. If the disease should begin with a pustule, the latter bursts; but instead of healing, a thickening of the cuticle takes place around it; and as from time to time a little fresh suppuration occurs, so the thickening and induration increase. Generally, however, the change of which we speak occurs slowly on the knuckles and on the first joints of the fingers without any preliminary vesication. A warty thickening of the epithelium takes place, which in course of time becomes of a dark colour and fissured, until a kind of ichthyotic condition is produced."—p. 264.

Dr. Odling contributes two papers: one upon the Toxicology of Copper, and one upon the Nomenclature of Organic Compounds. Another chemical paper, "On the Water of Guy's Hospital Well," is the work of Mr. Dupré.

We may conclude our notice by drawing the attention of the reader to Dr. Pavy's endeavour to introduce almond food as a substitute for bread in diabetes. It is well known that patients refuse to continue the use of gluten and bran bread and biscuits for any length of time; and, moreover, traces of starch are obtainable from the bran, and the gluten is declared to be about as nice as india-rubber. Now Dr. Pavy tells us that there is not a trace of starch to be discovered in the almond, and it happens that the sugar and gum are easily separable from the other constituents through the agency of water, thereby leaving a material as unexceptionable for the diabetic patient as is animal food. With eggs, this may be made into a very edible form, according to the author; and Mr. Hill, of Bishopsgate-street, has undertaken its production in the shape of biscuit, rusk, and bread, within the range of price of the other substances which have been proposed as substitutes for ordinary bread.

Manual of Veterinary Science. By WILLIAM DICK, Veterinary Surgeon to the Queen for Scotland, &c. Second Edition, Revised and Enlarged. pp. 194. Edinburgh: A. & C. Black.

THE contents of Mr. Dick's Manual were originally prepared as the article upon Veterinary Science in the seventh edition of the "Encyclopædia Britannica." They now appear in the improved form of a second edition of his well-known Manual. The first edition has been long out of print, and at one time it was the intention of the author to produce a larger work than the original Manual; but not being able to carry out this intention, Mr. Dick has revised and enlarged the latter, which he again presents us with. Since the first edition was published, in 1841, veterinary medicine has made great progress. Of this no doubt Mr. Dick is quite master, but it is to be regretted that he does not always take advantage of it, as, for example, when he continues to talk of *gutta serena*, or *glass eye*. This disease has long been banished from human ophthalmology, and we thought equally so from comparative pathology. In Mr. Dick's treatise too much is attempted in a limited space, and of this, indeed, it appears to us that the author is conscious.

SYPHILIS IN THE UNITED SERVICES.

To the Editor of THE LANCET.

SIR,—In the year 1860, as appears from the report of Dr. Graham Balfour, F.R.S., more than one-third of the admissions into hospital were on account of venereal diseases in the army at home; and according to a paragraph in *The Times* of October 10th, they exceeded one-half of the average strength of the army. This disease caused a loss in the course of the year to the army at home equal to 8·69 days of the service of every soldier.

In the navy it prevails to an enormous extent and in a most virulent form, as proved by the records of the Royal Hospitals at Haslar and Plymouth, and to which I have alluded in former letters.

I believe matters would have been much worse than they are, had it not been for the Lock Hospital established at Portsmouth some years ago, and partly supported by Government. I have been informed that a similar institution will soon be in operation at Plymouth. Let the municipal authorities co-operate with Government and the heads of the military and naval departments, and, aided by Sailors' Homes and Soldiers' Institutes, this great evil will be mitigated, and the health and efficiency of both services much improved. As Prof. Parkes, in his late admirable and eloquent lecture, said, "On Government, and on every officer who acts under it, is thus thrown a vast moral responsibility." I venture to affirm that this emphatically applies to the present subject.

I am, Sir, your obedient servant,

Kidderminster, Oct. 1862. JOHN ROSE, M.D., Surgeon R.N.

THE PRELIMINARY EXAMINATION AT THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—In reference to a letter signed "Judex" in your number of last week, I beg to state that the College of Surgeons do recognise the Examinations in Arts held at this Hall.

It is true that the recognition does not appear (owing to some inadvertence) in their printed regulations, but on the omission being pointed out, the Council promptly and courteously notified to me, through the President, that—"The Council agreed to place the Hall Preliminary Examination on our list of recognised examinations. All students, therefore, who have passed your Preliminary Examination may register at our College."

I am, Sir, your obedient servant,

THOMAS ANSELL, M.D.,

Apothecaries' Hall, Oct. 1862. Chairman of the Court of Examiners.

SMALL-POX IN SHEEP.—VACCINATION.

To the Editor of THE LANCET.

SIR,—I was living in Cambridgeshire, in the year 1848, when small-pox broke out among the sheep in that county. Conversing with a friend as to the best mode of preventing the spread of this disease, I suggested vaccination, to which he readily agreed. A neighbouring medical friend and I vaccinated about 300 sheep, and the disease went through its stages regularly. I think only six or seven sheep proved insusceptible. I cannot say whether any more sheep might have become affected with variola had not vaccination been performed. All I can say is, that the vaccination was quite satisfactory, and "the plague was stayed."

I am, Sir, faithfully yours,

Kimbolton, St. Neots, Oct. 1862. C. SPRAGUE, M.R.C.S.

THE LANCET.

LONDON: SATURDAY, OCTOBER 18, 1862.

ELABORATE comparisons have lately been instituted between the mortality in different general hospitals in this country and abroad. One result has been to show that the London hospitals are the least defective in the conditions which exclude those causes of death that are not strictly dependent upon the primary disease or injury. In other words, a patient admitted into a London hospital is less liable than a patient admitted into a Paris hospital to be attacked with pyæmia, erysipelas, gangrene, or some other form of hospital disease. But when the figures that represent the deaths in the several London general hospitals are compared with the view of determining the relative salubrity or skilfulness of treatment in these institutions, so many sources of fallacy crowd in that no trustworthy conclusion can be drawn. The highest mortality may very possibly be found in the best-constructed and most salubrious hospital, and the lowest mortality in the worst. The rate of mortality *per se*, then, is no test of the healthiness or efficiency of a general hospital. But in the case of a lying-in hospital the death-rate offers a certain indication. We possess something like a standard by which to judge the normal or unavoidable risk of a woman in childbed. If that standard be much exceeded, the inference that the patients are subjected to some unusual causes of disease is perfectly logical. In this manner the returns of the Registrar-General suggest that there is something wrong in the London lying-in hospitals—something that, in the absence of any direct information vouchsafed to the public by the governing bodies of these institutions, calls for inquiry. During the last quarter there were registered the deaths of 6 women in Queen Charlotte's and 2 in the City of London Lying-in Hospitals. During the first two quarters of this year the registered deaths were—in Queen Charlotte's, 13; in the British, 3; in the City of London, 4; and in the York-road, 1. Nor is this lamentable result to be traced to any special calamity of the year. During 1861 the registered deaths were—Queen Charlotte's, 18; British, 1; City of London, 6; York-road, 13. And during the five years 1857—1861, 129 women were lost in these four small institutions. This number, appalling as it is, would undoubtedly have been greater had it not been found necessary to close the hospitals at intervals in order to arrest the mortality. We believe that the absence of deaths in the York-road hospital this year is explained by the absence of patients. But it will be said—"The bare statement "of 129 deaths gives no measure of the childbed mortality; we "want the total number of deliveries." This is true. The Registrar-General gives no information upon this point; the authorities of the hospitals must supply it. There is no accessible public record which gives the data necessary to determine the rate of mortality and the causes of death in these hospitals. We doubt whether the governors themselves are furnished with these data in an intelligible form. As the case stands, the burthen of proving that the mortality of lying-in hospitals is not excessive rests with those who are in possession of the records. In the meantime the mortality may be tested approximately by reference to the standard out of doors, and by a rough estimate of the hospital deliveries. During the same five years, the mortality in the practice of the Roya Maternity Charity was 56 out of 18,751 deliveries, or 1 in 335. The great majority of the patients of this charity belong to the most destitute classes, living in the most wretched tenements of the poorest districts in London. Certainly they include a fair proportion of bad cases, in an obstetrical sense. It is not easy to conceive why the deaths should be more numerous in a given number of patients delivered in hospitals than in a like number drawn from the same class of society delivered at their own homes, unless we imagine some special lethal cause to exist in the hospitals. It is too well known that such a special cause does exist. Puerperal fever, although at times occurring in isolated cases, or even presenting some features of an epidemic character amongst the general population, may be regarded as a peculiar product of lying-in hospitals. There can be no doubt that a large proportion of the 163 hospital deaths referred to above were due to puerperal fever of a nosocomial kind. In an excellent paper on Puerperal Fever published by Dr. TILBURY FOX in the last volume of the "Obstetrical Transactions," we find that the average number of deliveries during twenty-eight years in the York-road hospital was 208 yearly; and that during this time the total deaths (180) exhibit an average of 3·085, or exceeding 3 per cent. of labours. Such a result is fearful to contemplate; it becomes shocking when we reflect that this sacrifice of human life is artificially produced, and that it may therefore be prevented. If we apply the imperfect data in our possession to the estimation of the death-rate in the four lying-in hospitals during the last five years, we may conclude, without risk of serious error, that the total deliveries did not much exceed 5000. This number has to bear 129 deaths, which gives a death-rate of 2·6 per cent. Now the death-rate of the Royal Maternity Charity during the same five years was barely 3 per mille. Hospital midwifery in London is therefore nearly ten times more fatal than home midwifery. During these five years, the total deaths from puerperal fever in the practice of the Royal Maternity Charity amounted to 14 only, and that out of 18,751 labours. This number of labours conducted in lying-in hospitals would have yielded nearly 500 deaths instead of 56. As it is, confining calculation to the estimated 5000 hospital labours, it may be affirmed that they exhibit an excess of 114 deaths, all of which may be ascribed to inherent hospital conditions.

These are facts that cannot fail to suggest serious reflections. In the interest of humanity—in the cause of charity, in whose name hecatombs of unhappy trusting women have been destroyed—we ask, Are lying-in hospitals necessary? If the reply be unfortunately in the affirmative, then it must be asked, To what extent are they necessary? For it is obvious that these institutions ought to be maintained at the minimum scale. The question is one of pressing importance. Proposals have been made to erect a new lying-in hospital in the metropolis; and it has even been contemplated to attach a lying-in ward to a general hospital. Overwhelming must be the demand for hospital succour to justify these propositions. A heavy responsibility rests with those who advocate them. Before extending the certain evil and doubtful good of hospital succour to lying-in women, it would be well to call upon the governors and administrators of the existing lying-in hospitals for full and candid histories of the working of their institutions.

SHORTLY before the close of the Parliamentary session of 1861, an Irish member, Mr. JOHN A. BLAKE, drew the attention of Sir ROBERT PEEL to the want which he maintained existed in the Irish District Lunatic Asylums of sufficient necessary appliances of a moral and social character for promoting the happiness and recovery of the insane. It is true that an important matter was here left to a very late period, and close upon the accession to office of SIR ROBERT PEEL, who could be but imperfectly acquainted with the condition and management of the Irish asylums. But Mr. CARDWELL, with whom the duty of dealing with the question on the part of Government would have devolved, vacated the office of Chief Secretary for Ireland two or three days before the time when the subject would have been brought forward. The new Secretary, however, having intimated to the member for Waterford that he was desirous of hearing what Mr. BLAKE had to urge concerning the asylums in Ireland, the latter felt obliged to bring forward the matter under such disadvantages as have been alluded to. Furnished with certain information, the Irish Secretary defended to a considerable extent the institutions in question; but from various changes which have recently taken place in them, it is clear that Sir ROBERT has redeemed the promise he then made by making himself personally acquainted with their requirements. In doing so there can be no doubt that the authorities of some institutions have felt themselves ill treated and undeservedly blamed, whilst others really deserving of reprimand have escaped what they merited. A recently issued Report of the Belfast Asylum makes us acquainted with the fact that one day last autumn the following interrogatories were forwarded from Dublin Castle to the responsible head of the Belfast Asylum:—

"How was it that yesterday both the manager and matron of the Belfast Asylum were absent at one and the same time from their duties? Is not this a fit subject for inquiry?

"Again, Can it be the case that the attendants in the Belfast Asylum carry clubs when accompanying visitors through the wards? Has there ever been an instance of the use of their clubs on the part of the attendants towards the patients?

"Pray make these inquiries of the Board, and report immediately. "Signed, ROBERT PEEL.

"P.S.—I am told that yesterday, in the absence of the manager and matron, the condition of the house was anything but cleanly, although it has got the character of being a well-conducted establishment.—Signed, R. P."

And such we believe it to be, and are therefore not surprised that these accusations were shown to be unfounded, and consequently that the Chief Secretary himself, shortly and unexpectedly, should visit the asylum, and feel compelled to enter the following report in the Visitors' Book:—

"I have this day visited this institution; but it is difficult to judge of its general cleanliness on ordinary occasions, from the fact of the wards and every part of the corridors having just been thoroughly washed, the beds arranged, with clean linen, &c."

There is no doubt that (what we really consider to be) an undeserved inuendo lies couched in the above; but the statement of *fact*—and that is the essential thing—is to the credit of the asylum. But whilst some hardships and sharp practice may have occasionally resulted from the recent *razzia* of the Chief Secretary, much benefit has also accrued. During the late session, the member for Waterford gave "Notice of Motion" "To call attention to the defects in the moral treatment of "insanity in the public lunatic asylums of Ireland, and to "move that in the opinion of this House it is the duty of her "Majesty's Government to take steps to carry into effect the "principal recommendations contained in the report of the "commissioners of inquiry into the state of the lunatic asy-"lums of Ireland."

As there has been much misrepresentation and misconception concerning Mr. BLAKE'S statement respecting the Irish asylums as contrasted with the English, and as a comprehensive view of the question is necessary for the furtherance of future legislative interference, Mr. BLAKE has come before the public at large with a printed exposition of the subject he has been engaged upon.* It has been assumed that the member for Waterford charges the Irish asylums with being generally inferior to those of this country. But he does no such thing. He positively states "that, taken as a whole, they are quite as good as those of England and Scotland;" though he as stoutly maintains that there are in "England some half dozen "institutions far superior to any of their neighbours, and "equally superior to the Irish ones." His object is to make this known, and to bring up the latter to the high position of the former. Such asylums as those of Bethlehem, Derby, and Leicester are as good specimens of institutions for the insane as any State can as yet exhibit; and it is not surprising that an Irish member should desire their main features to become well known throughout Ireland. There may be certain places in Ireland even better than some in England; but being better than something else manifestly bad is not sufficient to justify the cessation of all attempts at improvement.

Do the Irish asylums, asks Mr. BLAKE, according to the best received opinions as to the treatment of insanity, fulfil, either as regards appliances or system, the requirements for the moral curative treatment of insanity?

"I repeat again, that even regarding them altogether as asylums for the insane poor, and having every regard for wise economy, they fall greatly short of what they ought to be in the above respects; and to this positive assertion I challenge contradiction—not from those who depend on official reports or hearsay evidence for their information, but either from medical men who, on their professional responsibility, will undertake to say that my statement is not well founded, or from non-professional persons who can show that they have taken anything approaching half the trouble I have done to make themselves acquainted with the subject, by visiting asylums, or obtaining information on the treatment of insanity from the best sources. Let any impartial person, of ordinary understanding, only learn some of the most simple principles which, by universal consent, should be carried out in the moral treatment of lunacy, and then visit any one of the Irish asylums, even the best, and I will rely for the vindication of what I have put forward concerning them on the decision which will be arrived at."

It has been attempted to combat any reasons for complaint against the system pursued in these establishments upon the ground of the alleged greater number of recoveries in the Irish than in the English and Scotch institutions. The inspectors of 1859 reported that the absolute cures in the former had reached, during the previous two years, 48·71 per cent., as against 36·99 in the Scotch and 38·49 in the English asylums. Upon this statement, Sir ROBERT PEEL not unreasonably—as Mr. BLAKE admits—sought to establish the superiority of the

* Defects in the Moral Treatment of Insanity in the Public Lunatic Asylums of Ireland; with Suggestions for their Remedy, and some Observations on the English Asylums. By John A. Blake, M.P. pp. 103. Waterford, 1862.

Irish over the English and Scotch institutions, instead of the reverse. But, as the member for Waterford points out, owing to the system pursued by the English parochial authorities, our asylums have become so choked-up with chronic cases that only 14 per cent. on the entire number in confinement are curable. On the other hand, from out-door relief for the insane not being permitted in Ireland, there is no inducement held out to keep them at home until they become incurable; and, except in a few districts where there is deficient accommodation, but a comparatively small number of really curable cases are retained long in jails or workhouses. Further, there is reason to believe that a greater number of harmless patients, in whom recovery is hopeless, are transmitted to the workhouse rather than to the asylum, as in England. The question has been asked, whether, as a rule, insanity is more easy of cure in the natives of Ireland than in those of England, supposing all things equal as to the time of coming under treatment. According to Mr. BLAKE'S inquiries, the Irish patients, though usually more violent at first than the English, are more speedily improved. This opinion would appear to be borne out by no less an authority than Dr. CONOLLY, who, in his work upon the "Construction and Government of Asylums," remarks:—

"The large number cured in the Irish asylums may in some measure be accounted for by the peculiar character of the patients. The Irish patients in English asylums usually recover rapidly, the form of disease being frequently pure excitement, which is soon allayed by quiet, temperance, and the orderly regulations of an asylum."

Be this as it may, and even admitting that the admirers of the Irish institutions are justified in their most laudatory opinions, if it can be shown that a good system may be made better, the thanks of both the ratepayers and the public are due to Mr. BLAKE for promoting a thorough investigation of the subject, and fearlessly pointing out what would appear to call for amendment. The question is one both of finance and humanity.

IN June last, the Secretary of State for the Colonies sought the advice of the Royal College of Physicians, on an inquiry to be instituted by the Government concerning a reported extension of leprosy in our possessions in the West Indies. A Committee was appointed by the College to take the subject into consideration, and a series of interrogatories, upon which reports might be founded, were drawn up by it for the guidance of the Government. These interrogatories have now been prepared for publication, and we give them in full on another page. With a very commendable regard to the opportunity afforded for eliciting information, not otherwise readily to be obtained, on a disease of singular interest, the Committee has suggested that the inquiry should not be confined to the West India Colonies alone, but extended to all our colonial possessions. Leprosy is known to exist in various British Colonies in the East; it prevails widely also in several provinces of the Indian Empire. It is to be hoped, therefore, that the investigation will ultimately include the whole of our foreign territory. Many members of the profession now resident in England, and who have had opportunities of observing the disease in the Colonies or India, might probably render good service to this inquiry. The Committee of the College of Physicians has expressed a desire to receive information on the subject. We urge, then, upon all who can aid to obtain from the Registrar of the College copies of the interrogatories.

It is worthy of note, that the need for this inquiry should have arisen almost contemporaneously with a re-awakened interest in the study of leprosy. Professor VIRCHOW addressed a note to the International Congress, held in London last year, appealing for help in collecting materials for an exhaustive historico-geographical account of the disease. "A malady," he justly observed, "which once pervaded the whole world; "which even now attacks thousands in every quarter of the "globe; and to the ravages of which the most ancient his- "torical records bear witness, is certainly worthy of the most "zealous study." An inquiry such as that suggested by the Committee of the College of Physicians can alone supply many of the details now wanting for a comprehensive account of the geographical distribution of the disease, the deficiencies in our knowledge of which were particularly pointed out by Professor VIRCHOW.

Remote as the practical importance of an acquaintance with leprosy may appear in this kingdom, from the greater portion of which the disease has now been long absent, it will not be amiss to recall a remark of the Census Commissioners for Ireland in 1851, which derives increased significance from the reported extension of the malady in the West India Colonies. Directing attention to the wide spread of leprosy of late years, under the name of "spedalsked," in Norway and the adjoining countries, and pointing out that cases had then very recently occurred in the northern parts of Scotland, the Commissioners remark: "It is quite possible it may again appear "in the British Isles; and although its approaches may be "insidious, its effects may not be the less destructive."*

Medical Annotations.

"Ne quid nimis."

SECRET POISONING.

THE statements of two eminent toxicologists have filled the public mind with an alarm which is, we trust, to some extent groundless. Many times recently the dull fear of prevalent secret poisoning has spread through the ranks of the people. The career of Catherine Wilson gives form and shape to some of the worst of the vague terrors which have been evoked. The enunciation by Dr. Taylor of a system of secret poisoning so extensive that he asserts his personal cognizance of no less than eight deaths from poison registered as due to cholera, has sharpened and intensified these misgivings. Dr. Harley has added a finishing stroke by more generally protesting his belief in wholesale domestic assassination. Such a statement has vague accompaniments of horror, which are the more dreaded because they take no definite form. Where is this crime to be searched out? By what signs shall it be suspected? by what weapons combated? Every horror loses some of its most alarming characters when properly confronted. We are not in a position to affirm or negative the facts which have been set forth, but there can be no doubt that exaggerated inferences have been drawn. To scrutinize this spectre more nearly is to rob it of some of its terrors. What are the weapons which the slow and secret poisoner can employ? If we search the list of poisons, and examine those which alone can suit his purpose, then we may learn to be on our guard. Let us scan the roll of deadly poisons, and we shall find few which can be employed in these

* Census of Ireland, part v., vol. i., p. 420.

days of inquests and analytical chemistry without instantly exciting suspicion, and leading to the detection of the criminal. Strychnia produces tetanic convulsions; tartar-emetic, purging and vomiting, with constant nausea; opium leads to coma; the mineral acids to destruction of the membranes lining the mouth and gullet. In truth, it may be said that of all the long list of lethal agents, there is perhaps only one so chronic in its effects, so tasteless, so easily confounded with symptoms of disease, as to be in any degree a safe agent for the secret poisoner. This is arsenic. Arsenic is the chosen agent of the malignant wretch who seeks to destroy his victims slowly and imperceptibly, and to confound his hellish arts with the insidious workings of disease. It is, then, important to note that chronic poisoning by arsenic is accompanied by certain symptoms which can hardly fail to betray the workings of the drug to the eye of one who is on his guard. These symptoms are: early inflammation of the mucous membranes, especially of the eye; itching of the eyelids, nostrils, and cutaneous surface; scaly eruptions on the body; loss of hair and nails. More or less, these are the symptoms which accompany the diarrhœa and ulceration of the bowel by which gradual emaciation and death are brought about. These are cases in which poisoning simulates English cholera, and Dr. Taylor owes it to the profession and the public to give further details on this subject. Forewarned is forearmed. Let those toxicologists whose experience leads them to believe that secret poisoning is prevalent, in whatever degree, point out the weapons of the poisoner, and succinctly trace the signs by which his unholy arts may be detected during life.

The case of Catherine Wilson does, indeed, suggest another dreadful phase of poisoning against which it is more difficult to take precautions. Her implements of destruction seem to have been cunningly forged from the medicines destined to bring health. Like Canidia, she added herbs of a peculiarly insidious character:

> "Herbas quas Colcos atque Iberia
> Mittit, venenorum ferax."

This is a matter which must to the medical profession suggest an unremitting vigilance. Where disease exists, the administration of medicines opens to the domestic poisoner a new avenue of crime. But this, too, might be blocked by vigilance. It is a channel grooved by recent criminals. Henceforth that path will be more dangerous, for every medical man will feel the necessity of watching with lynx-like sharpness cases where symptoms are aggravated by the remedies which should soothe them. This is the key to the detection of the nurse who mingles poison in the draught.

MARRIAGES OF CONSANGUINITY.

IT is something of a reproach to our physiologists that, after so much discussion, we are still in want of absolute evidence as to the effects of marriage of consanguinity upon the offspring. The charges brought against it are understood to include its tendency to favour sterility, idiocy, insanity, deafness, deformity, and scrofula. These have been accredited as observed and confirmed by popular opinion and general belief. Some special instances have been adduced, especially by Dr. Bemiss, and lately by Dr. Devay and other French physicians, which seem to prove, from the statistics of asylums, and the observed conditions of certain races, that physical defects are engendered and propagated by such marriages.

The question has lately been referred to a committee of the French Academy; but we have little faith in the power of a committee to go beyond collecting the existing facts known to individuals. As a rule, the reports of committees upon questions involving original research are waste paper. Little knowledge of human nature is required to explain why they should be so. An investigator working solely at a question of science has always the inspiriting conviction that his efforts will ultimately be recorded to his honour and in his own name, should he succeed in solving the problem which he proposes to himself. The contribution of original thought and labour to the work of a committee is an act of sacrifice; for whatever is achieved is passed to the credit of the whole number, and each man's work is anonymous. This is only one of the many reasons why the labour of committees is usually barren in original results, however useful in testing moot points. Those of the committee of the French Academy are not likely to be exceptional in this case: we must look to the work of independent inquirers for new matter.

Dr. Child, of Oxford, has shown an intention of entering the field. We have already noticed a paper by this author on the subject. Recently at the British Association he renewed the expression of his conviction that such marriages are not injurious. His argument is mainly founded upon well-known facts in the breeding of domestic animals. In answer to the statistical objections founded on observations of the human race, he replies that in this matter such statistics are "peculiarly inapplicable." We do not apprehend why they should be; on the contrary, at present we look with anxiety and interest to a further application of statistics, and to more extended and accurate inquiries founded on fresh statistical data. The argument from the successful results of in-and-in breeding in the production of specific varieties of oxen and horses appears to us by no means capable of that extended series of inferences which Dr. Child and others deduce from it. Undoubtedly breeds may be specifically varied by constant attention to in-and-in breeding. The careful selection of animals for such close breeding is followed by important results in altering the relative quantities of bone, muscle, and fat; in modifying shape, and varying the integumentary and other characters. Thus what are technically called the "finest" breeds are preserved by continuing for some time the same strain of blood; but there is obviously a source of fallacy in comparing the results thus attained, and even the manner of attaining them, with the ordinary conditions under which marriages of consanguinity are contracted. If the finest offspring of certain relatives, free from defect, were paired—if their children were again weeded, and the strongest married,—we should produce a breed in which would be evinced the best qualities of the race selected. We might get a race of six-feet men, or of five-fingered men, or of black-haired men. It would still remain to see whether they were less liable to disease or longer-lived. We believe that the opposite would be the result. Close breeding in animals will for several generations perpetuate fine points, but presently it leads to vital degeneracy. This is the matter to which we would direct the attention of observers. The improvement of shape by selection has, we think, been erroneously supposed to throw light upon the question at issue.

THE MEDICAL SOCIETIES.

ON the 1st of October the session of the Medical Societies may be said to have commenced with a meeting of the Obstetrical Society, one of the most active and flourishing in the metropolis. On Monday last the Medical Society of London resumed its sittings; a report of the proceedings of which will be found at p. 419. We commend the address of the President of the latter Society to the attention of our readers. At the commencement of the session it may be well to observe that a serious evil exists in some of the more important societies by the withholding of papers and cases on the part of the authors until it is too late in the session to read them in full and to discuss their merits. For several years past there has been a most meagre supply of papers for the earlier meetings of the Medical and Chirurgical Society, while the later have been so overwhelmed with material that there has been only time to read brief abstracts or merely the titles. It is needless to say that the value of a paper is by this means much injured, and discussion—a most important part of the proceedings—effectually prevented.

There has been a tendency of late to extend the length of communications in an unwise and unnecessary degree; the patience of the audience is thus exhausted, and the time for debate curtailed. Writers of such papers should call to mind the pithy remark of Sir Walter Scott, that he had not time to write his discursive Life of Napoleon Bonaparte in less than nine volumes. This is an excuse which would be repeated with bad grace by a medical author. If his paper be worth the trouble of writing at all, it is surely worth the trouble of condensing within such limits as would not weary the hearers. Besides this, discussion, to be of any value, should be strictly confined to the subject-matter of the paper. If the paper contain material worthy of being debated, it is simply impertinent in a speaker to launch out into theories or problems which have no bearing upon the point at issue. If, on the contrary, the production offer no subject for dispute, it should be dismissed with, if deserving so much, simple demonstration of approval. One of the most important duties of a president is to lead and regulate discussion. Such a control may be exercised as is perfectly compatible with freedom of debate: this guardianship of the interests of their Society has been manifested by many presidents. Firmness combined with urbanity is essential to a chairman, to whom his constituents look for something more than a dignified presence. There has been one president to whom we can refer without the apprehension of making any invidious distinction. Sir Benjamin Brodie, the respected chief of our profession, when president of the Medical and Chirurgical Society may be regarded as a model. Those who remember how he discharged his important duties will acknowledge that the mode in which the discussions were conducted under his sagacious control was characterized by a consistency, and consequent value, well worthy of being taken as an example. Those discussions were always practical, and never allowed to run into theoretical speculation or irrelevant remark.

POSITION OF ARMY SURGEONS IN INDIA.

IT would really appear as if the military authorities of the army in India were determined, if possible, to prevent gentlemen from entering the medical service. The Medical Warrant of 1858 has been violated in every conceivable manner. It is stated that the full surgeon has been deprived of the rank to which he was justly entitled according to the date of his commission; that medical officers have been debarred from sitting on mixed boards and committees; that medical invaliding committees are sometimes presided over by military officers; and that cavalry surgeons have been refused the forage for the number of chargers which their relative rank entitles them to keep. In addition to these grievances, the Warrant is said to be a dead letter in India as to pay and allowances. And now comes an additional insult in the following form:—

"Inspector-General's Office, Army Head Quarters'
"Simlah, Aug. 4th, 1862.

"*Circular Memorandum.*

"The Inspector-General has received the commands of his Excellency the Commander-in-Chief to acquaint medical officers, that it has been ruled that regimental surgeons are not to be mounted on any parade for inspection; that they may, however, *appear* on horseback in the field.

(Signed) "W. LINTON, M.D.,
"Inspector-General of H.M.'s Hospitals."

Any comment upon such a document is unnecessary.

SARRACENIA PURPUREA IN SMALL-POX.

THE administration of Sarracenia purpurea in the treatment of small-pox is a therapeutical suggestion of considerable interest. The paper which we publish in another column by Mr. Chalmers Miles furnishes valuable information on the subject. Whether the results of the trials be affirmative of its value or negative, thanks are due to this gentleman for the energy with which he has collected existing information, and furnished material for the necessary trials. A Committee of the Epidemiological Society, including Mr. Marson, are employed in testing this medicine, and we shall soon be in a position to make known the results. Meanwhile the attention of independent observers may be usefully directed to this inquiry.

Report
ON THE
DRAINAGE OF BRIGHTON,
WITH A
CHEMICAL AND MICROSCOPICAL ANALYSIS ILLUSTRATIVE OF THE POLLUTION OF THE SEA AND WELL WATERS.

II.

THE chemical characters of the sea-water in front of the houses at Brighton at ebb tide are, the diminution of the weight of a given bulk of the water and its intermixture with impurities which are not visible in the same quantities of pure sea-water at a distance from the contaminating influences of sewage. The smell we have already mentioned as most powerful and perceptible is near the shore, but extending a considerable distance seaward. This is most oppressive in dry weather, but is still very patent to the sense of smell when the sewage has been largely diluted with storm water, which has been described as producing a remarkable alteration in the colour of the water for a considerable distance from the shore.

The first figure represents the condition of the sea in a heavy rain a few yards from the shore at the Old Steyne. The amount of foreign organic matter must be much less than in the circumstances when the sewage is poured undiluted from the aperture in the pipe near the shore. The quantity of sandy particles will no doubt be greater; but still these, in many parts of the figure, are insignificant compared with the fragments of organic tissues and the amount of animated life which are so abundantly present.

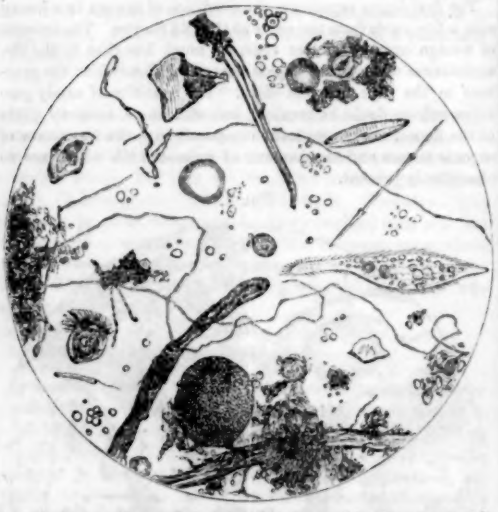
FIG. 1.

The long flattened bands in this cut are cotton fibres, apparently disintegrating. Then we observe a starch granule in a state of dehiscence, and abundance of siliceous particles brought down by the rain from the pavement of the streets. In great

abundance the spores of fungi are apparent, and a fungus of common occurrence (Penicillium glaucum) was here observed in innumerable quantities, although it has only been delineated on a limited scale, not to overcrowd the drawing. In the animated kingdom, that curious class is well represented usually termed infusoria—an elementary series of animals whose simplicity of structure has given rise to so much difference of opinion among naturalists. They are described by Lamarck as destitute of every internal peculiar organ, and as consisting of a mass of varied cellular tissue, without head, eyes, muscles, vessels, nerves, and organs of respiration, digestion, or reproduction. Ehrenberg, on the contrary, has viewed them as highly organized, and supplied with peculiar organs as in the higher scale of being; while subsequently they have been considered by others as examples of a nucleated cell. Whatever view of their anatomy may ultimately be demonstrated to be the correct one, it is certain that the infusorial class, particularly the genera *Paramecium* and *Oxytricha*, is abundantly present in the sea-water in front of the houses in Brighton, and that the existence of these animals is accessory evidence of the intermixture of sewage with the sea-water sufficient to produce a disgusting compound fluid. In addition to these genera, we observe a few *monads* (monas), an equally or even more simple form of animated nature, of which the examples are in the earliest stage of their development.

The sample of sea-water from which the second drawing was made was taken at the same period as the first specimen depicted in the first figure, but at a greater length from the shore, at no great distance from the buoy which marks nearly the position of the mouth of the sewer-pipe emanating from the Old Steyne.

FIG. 2.



In this drawing there are many of the same objects as are seen in the preceding figure, but they are less densely congregated, the amount of sea-water and that of the sewage and storm water being less. Cotton fibres of domestic origin still occupy a prominent position; sand is observable, likewise monads; and in addition a diatomaceous class which has been assumed both by botanists and naturalists as pertaining to each of their favourite branches of the study of nature. The spores of fungi are numerous, which give rise to the abundant development of an infinite series of fungous filaments covering the field of the microscope.

The third drawing is made from the sea-water at the head of the pier, in which comparatively there is less impurity, where we see sand, cotton fibre (?), diatoms, and spores; but all more sparingly distributed than in either of the preceding figures.

FIG. 3.

From the results of the chemical and microscopical analyses to which the Brighton sea-water has now been subjected, it is abundantly evident that, should the present system be perpetuated of pouring the sewage into the sea, the visitors to this favourite watering-place will be subjected to the noxious exhalations from the mixtures depicted in the preceding drawings, and that at ebb tide bathers must immerse themselves in such objectionable water.

For the preceding microscopical investigations we are indebted to Dr. Dundas Thomson, the drawings and engravings having been entrusted to Mr. Tuffen West.

Some ambiguity seems to prevail, in the reports of the engineers, regarding the direction of the tides. Thus we find Mr. Hawksley apparently ignoring all the extensive observations which have been carried on for years in the Channel, and the deductions which have been made from them, and in a summary manner affirming from personal superficial observation—what would require years of mathematical accuracy to determine—that he has ascertained the direction and force of the tides. It appears, according to him (although contrary to what had been *supposed*), that the tide runs with nearly equal velocities, and for nearly equal times, whether flowing up the Channel or down the Channel; and that its course is not materially, nor indeed sensibly, influenced by the prevailing direction of the wind, unless for a brief period during violent gales. Generally, he says, at a distance of one-third of a mile from the shore the sea flows at the rate of from two to three miles in an hour, and possesses a mean depth of twenty feet or thereabout. Mr. M'Clean, on the other hand, states that after examining the direction of the tidal currents along the shore, he finds that after slack water the flood tide begins to make from the west, and flows in an easterly direction up to the time of high water. As this is a most important point in regard to the proposition to throw the whole of the sewage into the sea in front of the town, we consider it necessary to state what is accurately known on the subject. The direction of the flow of the tide at Brighton, whether to the east or west, or not at all in either of these directions, has long been disputed. The older charts and books of navigation asserted that the tide from the North Sea round the east coast of England met the tide which flows from the west up Channel in the vicinity of Dungeness and Rye harbour. Subsequent observers considered that the tides from the northward and eastward and southward and westward both meet at the Kentish Knock. The formation of the coast, in this view, between the South Foreland and the buoy of the Nore, within the stream of the Goodwin Sands, was adapted to prepare in a great measure for the opposing streams meeting without that wild commotion and furious contention which their coming together in a directly opposite line across the Channel might be supposed to occasion. It also admits, according to the same authority, of their gently blending their waters together, and smoothly taking the same course along both sides of the Long Sand, one

up the King's Channel into the Thames, and the other up the Queen's Channel into the Medway, making only a strong eddy or whirlpool about the Knock. The most recent view of the question is that the western tide wave travels from Land's-end to the Isle of Wight in six hours. Here the influence of the tide seems to cease, as the tide hour from this point eastward is eleven hours and a half, with small and irregular changes only. According to this explanation the eastern and western tides will meet along the whole coast from the Isle of Wight to the Downs, and perhaps to the coast of Suffolk—that is, along the whole of this tract the water is affected by the tide waves which arrive in the two opposite directions. But as the tide hours on the coast of Dorsetshire and Hampshire are the same as on the coast of Norfolk, it is obvious that the tide waves meet in opposite directions along these coasts, and must meet at some intermediate point—as, for instance, on the coast of Kent; and at this point the tide is later than it is if we go along the coast, either to the east and north, or to the south and west. At the place where the tides meet there will not necessarily be anything more marked in the stream of flood or ebb than at any other point. The tendency to opposite tide streams may partially balance each other, and leave only the difference of tendency in actual operation. The meeting of the tides, however, will not be in a single point, for by the laws of fluids the two opposite undulations, termed the tide waves, will be propagated independently of each other, and the fluid will be affected by both. According to all the facts with which we are acquainted, it appears that the tide wave has a tendency to move eastward; and hence the sewage discharged at the Old Steyne will be liable to spread itself out to the east in front of Kemp-town, and thus to form a continuous band of filthy water from Cliftonville to the eastern extremity of Brighton. The calculations for the plan for perpetuating the discharge of the sewage into the sea in front of Brighton as at present, are founded on the statements of the propounder of the scheme, which do not tally with the most recent and accurate observations on the laws of the tides in the English Channel.

In refutation of the assertion contained in Mr. Hawksley's report, that sewage cannot be applied with advantage to land at the present time, we are enabled to present the summary of a report on this subject by Dr. Dundas Thomson, F.R.S., the local authorities of St. Marylebone, which has not yet been printed. It is now thoroughly ascertained that sewage can be applied to land most profitably as a manure, the only difficulty being a financial one, depending on the cost of distribution. When the sewage is produced near available land, or when it can be conveyed by gravitation to land, the practical difficulties are overcome. At Craigentenny, near Edinburgh, the contents of an open sewer from the city are distributed partly by gravity and partly by pumping by steam power over meadows to the extent of about 300 acres. The grass is cut five or six times annually, and is sold to cowkeepers, yielding a gross return of from £20 to £35 per acre. At Croydon the whole of the sewage of the town is employed to irrigate meadows, which are hired for the purpose at a cost of £4 per acre, and are sub let to a farmer at £5 per acre. The sewage before passing over the land contains 39 grs. of solid matter in solution per gallon. It percolates the land and gravelly subsoil, is deodorized by this simple process, and deprived of all its putrefying ingredients, and runs off at the sides of the fields by an outfall into the Wandle. The composition of the sewage after irrigation is very nearly the same as that of the Wandle itself, the sewage containing 25·8 grains of solid matter per gallon, and the Wandle about 24·7 grains. At Hanwell Asylum, the sewage from the farmyard, comprising an establishment of thirty cows and several horses, &c., was collected in two tanks in an orchard, and was pumped on to the land. Vegetables were raised so profitably by this arrangement, that the sewage of the asylum, containing 1700 inmates, is now made to run into a tank on land attached to the institution, and is distributed in quantities estimated at 100,000 gallons per day over sixty acres, by means of a hand-pump and hose worked by five or six labourers (patients), who are only, however, partially employed. The following table shows the increase of crop gained by the irrigation:—

Grass per acre.

Unmanured land.	Manured land.
24 tons, 1st cutting.	35 tons, 1st cutting.
16 ,, 2nd ,,	28 ,, 2nd ,,
12 ,, 3rd ,,	21 ,, 3rd ,,
	8 ,, 4th ,,
52	92

Mangold Wurzel.

Unmanured land.	Manured land.
32 tons.	43 tons.

Lucerne.

Unmanured land.	Manured land.
20 tons, 1st cutting.	25 tons, 1st cutting.
12 ,, 2nd ,,	16 ,, 2nd ,,
	6 ,, 3rd ,,
32 tons.	47 tons.

From these facts it appears that the following increase is obtained:—

Grass yields ...	77 per cent. increase.
Mangold wurzel	34 ,, ,,
Lucerne	47 ,, ,,
Average ...	53

It will be observed that grass undergoes the greatest increase. But experience shows that the land could take up beneficially a larger amount of sewage at Hanwell than is applied to it, if it were available, and that a corresponding augmentation of the crop would ensue. At the City of London Schools near Hanwell, situated on a slope, with 1150 inmates, the sewage is collected by gravitation in a tank at a distance of upwards of one hundred yards in front of the school, and is distributed by irrigating furrows over the lower portion of the meadows, any overflow making its way into the Brent.

There is no doubt that there are fewer difficulties to be overcome in the application of a small amount of liquid matter to a limited area than of a large quantity to a more extensive surface, just as a small scheme is more in the power of ordinary minds to compass than extended organizations. But the time is fast approaching when the public health will demand that the *débris* of cities and towns shall be rightly applied, and not allowed, from want of enterprise, to poison our streams and spread sickness and death among the population. What is required at Brighton is, not that a scheme should be devised for irrigation, but that a plan should be adopted which shall be compatible with the native purity of the sea in view of the inhabitants, and that all matter likely to affect the senses or prove injurious to health shall be removed to a distance. These are the essential requisites in a scheme of drainage in the present condition of knowledge. If, in addition, the sewage can be so conducted away that it may be partially used for enriching the neighbouring land at the present time, the arrangement should receive support. But if there is evidence incontrovertible that such a waste of valuable material cannot proceed much longer, and that those who are occupied with sanitary science are of opinion that all drainage should now be planned with such an end in view, it becomes the duty of the local authorities to adopt a system of sewerage which will tend in the proper direction.

It will be observed that in one of the reports the application of sewage for irrigation is slighted on the ground that its value has been much exaggerated. Now the fact of over-valuation may be correct, and yet the deduction that we are to reject the true estimation of its value altogether may be wholly erroneous—nay, highly mischievous. In the drainage of the metropolis, the great object has been to separate the sewage from the river near habitations, just as it should be at Brighton in reference to the sea. The London sewage is to be conducted to a distance from town by parallel conduits with the river; and at first it will be pumped into the river and carried to the sea. This is all that the metropolitan authorities have to do in reference to the public health, which is their peculiar function. But their scheme is of such a nature that the contents of the sewers may be, partially at first, and in the course of time wholly, devoted to the improvement of the land through which it flows.

From the data supplied by the Sewage Commission, derived from actual experiment by practical men, the money value of the total sewage of Brighton cannot be estimated by the lowest calculation at a less sum than *twelve thousand pounds sterling* a year. This statement we make advisedly, and do not think it can be controverted by any opposing argument. We advise the inhabitants of Brighton to make inquiry into such calculations, and not to be misled by the empty head-shakings of any number of wiseacres. Let them bear in mind that sewage has been proved to possess a pecuniary value; that the above is not an exaggerated estimate of the Brighton sewage, and that to throw *any fraction* of it into the sea is to lose money which can never be recovered. What we would

beg of them then is, to insist that the sewage shall be conveyed some distance from the town, and that the plan by which this object is accomplished shall be compatible with the utilization of such valuable materials in agriculture.

New Remedies.

ON

THE EMPLOYMENT OF THE SARRACENIA PURPUREA, OR INDIAN PITCHER PLANT, AS A REMEDY FOR SMALL-POX.*

By H. CHALMERS MILES, F.S.S., L.R.C.P.E., &c.,
ASSISTANT-SURGEON, ROYAL ARTILLERY.

A PAPER written by me, introducing to the notice of the profession an "Indian Remedy for Small-Pox," was read to the Epidemiological Society of London on Nov. 4th, 1861, and an abstract of it was published in THE LANCET of Dec. 7th of that year. On account of the season of the year (mid-winter), I was unable to comply with the Epidemiological Society's request to send an additional quantity of the root; and on my being ordered from Nova Scotia to Canada, I found that the difficulty in obtaining it was materially increased. Hence the delay in this matter, and the impossibility, up to the present date, of giving the medicine a full and satisfactory trial.

Since, however, the publication of the paper to which reference is made, many fresh particulars have been obtained by me, and I now beg, as succinctly as the nature of the subject will permit, to bring the use of this Indian remedy under your official notice, while I venture to advocate its employment on the widest and most extensive scale.

The Sarracenia purpurea, vulgarly called Indian cup or pitcher plant, side-saddle flower, huntsman cap, fly-trap, trumpet plant, or *mue-ca-kem-ma-dos*—i. e., frog's leggings, by some Indians, is an indigenous perennial plant, and may be found throughout the whole of North America and the Lower Provinces, its actual limit being from the bleak coast of Labrador to the wide savannahs of Florida and the shores of the neighbouring gulf. The sarracenia belongs to the tribe of water plants, and is only found in wet, marshy ground; but it grows in such places in great abundance. Wood, in his "Class book of Botany," says the plant "belongs to the natural order *Sarraceniaceæ*, Sex. Sys., *Polyandria Monogynia*. The leaves, or *ascidia*, are from six to nine inches in length, radical short-globose or cup shape, having a broad lateral arched wing, from a half to an inch in width, and extended on outside of mouths into a broad, cordate, erect lamina or hood, covered with reversed hairs. The *scape* is from one to two feet in height, terete, smooth, and supporting a single, reddish-purple flower of large size." This terminal flower has two flower-cups, the external consisting of three small leaves, the internal of five leaves—egg shaped, shiny, obtuse, and of a brown colour. The blossoms (five in number) are guitar-shaped, repeatedly curved inwards and outwards, and finally reflected over the stigma, which is broad and spreading, divided at its margin into five bifid lobes, alternating with the petals, and supported on a short cylindrical style; this is surmounted by the stamens, which are numerous, having short threads and large two-celled yellow anthers attached on the under surface.† Usually there are six long leaves or pitchers to each plant; the leaf springs from the root, and is formed by a large hollow tube, swelling out in the middle, and curved and diminishing downwards, till it terminates in a trumpet-shaped appendage, which is hirsute on the inner surface. The hairs, as already mentioned, point downwards, probably to impel the insects &c. which move on the lip or lid of the cup, to pass into it. The leaves lie on the ground, their stems embedded in moss, and half concealed by wet twigs and creepers, with their mouths turned upwards, and the trumpet-shaped appendage or lid thrown partially backward and outwards, so as to be ready to receive any rain that falls. Each pitcher holds about three ounces of water, and it is a likely supposition that the water insects &c. which creep into the pitchers decompose, or become digested, and thus go in some way to form nourishment for the plant. Dr. King, of Cincinnati, writes: "There are several varieties found in the swamps of Massachusetts and in the south, such as the *S. heterophylla*, *S. rubra*, *S. flava*, *S. variolaris*—all of which probably possess similar medical virtues." The root of the *S. purpurea* has a bitter and astringent taste, and yields its properties to water. It contains colouring matter, resin, an acid salt of lime, and an *unknown* salt and lignin."

It appears that the Sarracenia purpurea has been known (though imperfectly) for some years to the class of medical practitioners known on the American continent under the title of "Eclectics," and the *leaves* of the plant (valuable as deobstruents and cathartics) have been sparingly passed in medical commerce in some Atlantic cities. The root, though it was experimented on so far back as 1847 by Dr. Porcher, of South Carolina, is still unknown, and has been scarcely used as a medicinal agent. Prof. Cleaveland, U.S., however, has pointed out its well-marked effects on the ganglionic system, and makes the following remarks:—"My experiments are confirmatory of the utility of the plant in cases where there is a sluggish or torpid condition of the stomach, intestines, liver, kidneys, uterus, and the various functional derangements; and it must be evident that this plant possesses valuable properties. It is even possible that a *new salt similar in importance* to morphia or quinia *may be extracted from it*, and thus a new and valuable remedy may be added to our materia medica."

This last observation of the learned American professor concludes my digest of the book-lore of the subject. Doubts, however, have been expressed as to whether the medicinal properties of the Sarracenia purpurea are best extracted by cold or by boiling water; questions have been asked as to in which condition—in the dry or the recent state—the root may be considered most efficacious; while experiments have been made to ascertain if the *leaves* possess similar properties to the *root*. On these points I will essay an answer.

It has come to my knowledge, since the last notice,† that the existence of a remedy for small-pox had been for a long time partially known to some of the North American Indians, but only a few in a single tribe possessed any clue as to the nature of the herb whence the root was obtained. The Micmac squaw, who alone knew that the root of the Indian cup plant was the remedy in question, gathered it in great secrecy, and merely served to the applicants for her aid such quantities of the medicine, in the form of a herb-tea, as were required, either when small-pox was prevalent in certain districts, or only its approach apprehended. It was during the last outbreak of the disease amongst the Indian settlements in Nova Scotia that the decoction of the root achieved its greatest triumph; that the faith in its efficacy became widespread and general; that wherever administered with timely zeal, recovery seemed assured; and that large numbers in the plague-stricken camps took occasional small doses of it, in the belief that it acted with prophylactic effect. Now the Indian authority for its use asseverates, with peculiar emphasis, that the *root* alone is efficacious in small-pox; and that preparations of the leaves are *useless* in *that* disease. The directions urged to be adopted are, that the root, when fresh gathered, should be at once slowly and thoroughly dried, the thin fibres around it pared away, and the firm solid root alone used. The method of making the decoction is to slice from one to two ounces of the dried root into thin pieces, place them in an earthen pot, add a quart of cold water, and permit the liquid to simmer gently over a steady fire for two or three hours, so as to lose one-fourth of its weight. It was repeatedly asserted that the *fresh* root was not so powerful as the *dried* root, made into a decoction as described.

Observations.—1. In the case of an individual suspected to be under the influence of small-pox, but with no distinct eruption upon him, a large wine-glass of an infusion of the root of the plant Sarracenia purpurea, or pitcher plant, is to be taken. The effect of this dose is to bring out the eruption. After a second or third dose, given at intervals of from four to six hours, the pustules subside, apparently losing their vitality. The patient feels better at the end of each dose, and in the graphic expression of the "Micmac," "knows there is a great change within him at once."

2. In a subject already covered with the eruption of small-pox in the early stage, a dose or two will dissipate the pustules and subdue the febrile symptoms. The urine, from being

* Communicated to the Director-General of the Medical Department of the Army, and contributed by him to THE LANCET.

† American Dispensatory, 8th Edition.

* The Sarracenia purpurea is the only one of the species generally noticed in Nova Scotia and the adjacent provinces.

† Vide THE LANCET, Dec. 7th, 1861.

scanty and high coloured, becomes pale and abundant, whilst from the first dose the feelings of the patient assure him that "the medicine is killing the disease." Under the influence of the remedy, in three or four days the prominent symptoms of the constitutional disturbance subside, although, as a precautionary measure, the sick person is kept in camp until the ninth day. No marks of the eruption (as regards pitting, &c.) have been left in cases examined, if treated by the remedy.

3. With regard to the medicine acting (as is believed by the Indians) in the way of a preventive, in those exposed to infection, it is curious to note, that in the camps where the remedy has been used the people keep a weak infusion of the root prepared, and take a dose occasionally during the day, so as to "keep the antidote in the blood."

The above observations were borne out in every instance in which the remedy was used amongst the Indians, and are thoroughly corroborated in the case of a white person which is narrated below.

The most marked results of the administration of the Sarracenia purpurea in persons already covered with varioloid eruption, are—

1st. Rapid diuretic action, with immediate lessening of the febrile symptoms; and, more tardily, it acts as an evacuant on the large intestines.

2nd. On a repetition of a dose of the decoction (which perhaps should be given after three or four hours, instead of at longer intervals), the mitigation and obvious improvement, should any symptoms of cerebral disturbance be present.

3rd. Its extraordinary effect (within a brief period) in altering the *character* of the cutaneous eruption. It seems to arrest the morbid process, and induce a healthy instead of diseased action. The pustules appear simply to be deprived of their vitality; they desiccate and fall away.

4th. The prevention of *pitting*, consequent, it may be supposed, on the whole nature of the pustule being changed in the manner just noted.

In all practicable instances it is desirable that the administration of the decoction should be commenced so soon as well-defined symptoms of variola are declared, and that no other medicine (save a purgative if absolutely indicated) be given.

I will here submit the case to which allusion was made. It is furnished me by Dr. Jas. H. Richardson, of Toronto, who has also, with the frankest courtesy, given me much other valuable information:—

"L. M. N——, (the son of a clergyman,) a young man enjoying moderately good health, aged twenty-one, contracted small-pox, the disease being prevalent at the time in the General Hospital at Toronto. He began to complain on the 8th of April last, but was not seen by me till the 13th. He was then suffering from intense headache, combined with partial stupor, and had the usual symptoms of variola. The eruption had just appeared first about the groin, but in the subsequent twenty-four hours spread over face, trunk, and extremities. He had been vaccinated in childhood. The eruption, however, did not appear modified, but continued to run its course, as in a case of pure small-pox. The constitutional disturbance, though relieved as the eruption came freely out, was very great, and gradually increased; the pulse continuing very quick, the tongue much coated, urine very scanty, bowels costive, and delirium very violent and nearly constant. I had early unloaded the bowels, and had given him freely salines and sedatives; but the treatment generally appeared of no service whatever. On the fourth day of the eruption his condition in every respect was much worse, and I then determined to try the Sarracenia purpurea. It was not, however, procured until late on the next day (the decoction was of the strength of an ounce of the dried root to a pint, and given in wineglassful doses every four hours). The result after a few hours (the third dose) was most encouraging; the pulse diminished in frequency; the delirium nearly ceased, becoming entirely changed in character (his father, who watched him, remarking that the delirium seemed to lose all its terrifying conceptions, and that its wanderings seemed soothing, gentle, and associated with his ordinary pursuits); the urine increased in quantity, and became pale; the tongue commenced to clean; and the bowels acted of themselves. On the eighth day (just two days and a night from commencing the sarracenia) slight secondary fever set in, on the ninth the pustules began to dry up, and on the tenth the medicine was discontinued, convalescence having commenced. He shortly recovered *without being pitted*, although the eruption was confluent on the face."

The father of this young gentleman also remarks—"You may recollect Dr. R. remarked, after the decoction had been taken for two days, that the pitting of the pustules seemed arrested."

Concerning this case, Dr. Richardson notes: "On the whole, I must conclude that the effect produced by the sarracenia was most satisfactory and well marked. The disease continued very severe until it was administered, and became entirely changed in its severity after the administration of the third dose, the effect being due to it alone, as no other medicine was given after it was commenced. I am forced to the conclusion that the secondary fever was much controlled by it, and that desiccation took place much more rapidly than would have occurred otherwise. I shall now give it a more early trial, and have every confidence in its beneficial effect."

In a scientific point of view, the greatest interest will undoubtedly attach to those cases of natural, unmodified small-pox in which the remedy is used, and I trust before long that many intelligent observers in all parts of the world may have it in their power to obtain the root, and give it as ample a trial as their opportunities will permit. In military medical practice in the United Kingdom, it can scarcely happen that such cases will be presented; but many examples—in Africa, China, Australia, and our foreign possessions, especially in some of the enormous districts in the Eastern Presidencies, where vaccination can be at best but incompletely carried out,—many examples, I think, of pure, unmodified small-pox may be selected, and a wide employment of this medicine be easily undertaken. So much, indeed, has attention already been awakened as to the efficacy of the Sarracenia purpurea in small-pox, that I can hardly doubt, in many parts of Canada and in the Northern States, every opportunity is being chosen for its trial, and that even now many interesting and important facts are silently accumulating on that vast continent.

The learned and distinguished President of the Epidemiological Society, Dr. Babington, assures me that, on receipt of the root in sufficient quantity, Mr. Marson, of the Small-pox Hospital, has determined to afford it a thoroughly satisfactory trial; and I hope that other of my professional brethren in civil life, with similar wide opportunities for collecting authentic data, will likewise be able to test its "medical virtues" in a large number of cases. If the Director-General of the Army Medical Department is also pleased to sanction its employment on trial by the medical officers of the army, scattered broadcast in every country in the world, in a comparatively short time we shall be able to generalize and digest a vast mass of well-selected and carefully arranged facts.

I do not think that the importance of this matter can be overrated, for if the "Indian Remedy for Small-pox" comes out as completely successful on general trial as it has certainly proved amongst the "tawny Micmacs," it will practically create an entire revolution in medical practice, and become, with God's blessing, the means of incalculable good in every land on which the sun shines.

P.S.—Considerable quantities of the dried root of the Sarracenia purpurea have either been or are about to be shipped by my direction from Canada and the States, consigned to Messrs. Savory and Moore, of London. I have requested this firm to issue, *free*, a small quantity to any of the medical societies of the metropolis who may wish to apply for it. The Sarracenia purpurea will (for a very long time) only be obtainable (genuine) in England at Messrs. Savory and Moore's; and this firm, I apprehend, will retail it just at the price per lb. which will cover the expenses incurred.*

St. Helens, Montreal, C.E., Aug. 25th, 1862.

THE

GREAT INTERNATIONAL EXHIBITION.

XVI.

REPORT ON THE SUBSTANCES USED FOR FOOD EXHIBITED IN CLASS III.

BREAD.

FOR many centuries the art of bread-making has remained, especially in England, in a stationary condition, few or no improvements therein having been made. In this country the laborious process of mixing the flour and water together has been performed, until recently, almost universally by the

* Since the above was written, Messrs. Savory and Moore have received the root, and it is now on sale.

naked arms and hands of perspiring men; the leaven used has in nearly all cases consisted of yeast; while the form of the principal portion of the bread made has been cubical—one of the very worst shapes which, having regard to uniformity of baking, can be adopted.

Within the last few years, however, there have been signs of an approaching revolution in this art. Government has recently appointed Mr. Tremenheere to inquire into the subject, and that gentleman has just completed an elaborate, able, and very impartial report, in which the evils of the present system of manufacture and the hardships of the journeymen bakers are so clearly set forth that it cannot fail to be followed by some beneficial changes. Further, machinery is just beginning to supersede the objectionable hand-and-arm process of mixing; a system of leavening bread apart from yeast, by injecting, with the aid of suitable machinery, carbonic acid into the dough, has been on its trial in this metropolis for some time past; lastly, a much larger proportion of the bread is now made up in other forms than the cubical.

The desirability of the introduction of machinery in bread-making is unquestionable. Whether the aërated system of manufacture is a real advance or not, and whether the bread made by that process is as well adapted for general consumption as that made with yeast, are points upon which a difference of opinion prevails, and which can only be satisfactorily determined after greater experience than there has yet been time to acquire.

The mixture of the flour and water by machinery in closed vessels has not only the advantage of cleanliness, but the incorporation is more intimately and uniformly effected, and there is besides a considerable saving of material resulting from the absence of waste.

In the aërated process there is a still further saving, since those changes consequent upon fermentation do not take place as when yeast is used.

Those who object to fermented bread do so on the ground that some of the changes induced by fermentation in the constituents of the flour are of a nature to give rise to derangements of digestion. Of course those who hold this opinion are so far in favour of the aërated bread.

It is very certain that unfermented bread agrees with some persons better than fermented; but the reverse also holds good, and whether on the whole, and as a general rule, unfermented, and particularly aërated bread, is preferable as an article of diet to fermented bread, has not yet been determined. One great fact is, that to this date the chief part of the bread used by civilized nations throughout the world is fermented.

The important article bread is but poorly represented in the Exhibition, probably owing to its perishable nature. The only exhibitor is Mr. Henry Dodson, of Blackman-street, Borough, who exhibits some very well-made loaves of Unfermented Bread, Unfermented Nursery Biscuits, and Biscuit Powder used as an article of Infants' Food. As already remarked, some persons find unfermented bread agree with them best; and it is to supply this demand that Mr. Dodson's manufacture is directed. The so-called nursery biscuits resemble a small circular dinner-roll rather than a biscuit.

The ingredients used to give the requisite lightness to the ordinary unfermented bread are usually carbonate of soda and hydrochloric acid, the carbonic acid being set free in the act of incorporating the acidulated water with the flour and carbonate of soda, chloride of sodium being formed. In some instances tartaric acid is used, a tartrate of soda then resulting.

Biscuits are not usually fermented, and the advantage of employing biscuit-powder for the feeding of infants is, that the flour is partially cooked, and is so presented to the stomach in a form better adapted for digestion.

In this place may be noticed the case of Mr. Alexander Robb, of St. Martin's-lane, who is an exhibitor of infants' and invalids' food, cakes, wine, soda, and other biscuits.

The "Prepared Nursery Biscuits" are spongy and porous, like fermented bread. The "Nursery Biscuit Powder" is another well-known article, of which samples are shown in this case.

Mr. Robb has received honourable mention for the goodness of quality of his biscuits and infants' food.

RUSKS.

These, in most cases, are really a form of fermented bread, with the addition, in some instances, of sugar, milk, or cream and butter, the whole being carefully and thoroughly baked. Mr. Hay, of North Audley-street, exhibits some improved Dutch rusks for invalids of weak digestion and infants. They are very carefully made, with pure ingredients, and are thoroughly baked. They form a light, nutritious, and very digestible article of food.

BISCUITS.

A few years since nearly the only biscuits attainable were captain's and Abernethy's. Over the first, there was, in eating them, a very considerable risk of breaking one's teeth, unless these were adamantine; while the second, though in our opinion a very much better biscuit, necessitated the use of a toothpick to get rid of the carraway seeds which obtruded themselves into every hollow or interstice in the teeth. Within a very recent period, however, the manufacture of biscuits has become a great and increasing trade. If report is to be relied upon, the workmen in some establishments are numbered by hundreds, while the variety of biscuits produced is endless, most of them having the recommendation that they do not require either extraordinary powers of mastication or digestion.

The materials of which biscuits are composed are various. Wheat flour is the staple component; bran is found in some; oatmeal occasionally; rice, sago, arrowroot, and even ground almond seed in others—as in the Ratafia biscuits; milk, cream, and butter are added to many; while the flavouring substances used are numerous.

About these "arrowroot biscuits" we desire to make a few remarks. They are very nice and crisp, easily masticated, and probably readily digested; but when made wholly of arrowroot, they contain no nitrogen. They therefore do not add a particle to strength. Woe be unto any poor wight who, ignorant of the physiology of food, lunches off such arrowroot biscuits. If, as it may happen fortunately, he indulges at the same time in good nitrogenous cheese and in sound wholesome beer, his position is improved.

There are no less than six exhibitors of biscuits—namely, Messrs. Peek, Frean, and Co.; Messrs. Huntley and Palmer; Mr. Mackie, of Edinburgh; Messrs. M'Call and Stephen, of the Adelphi Biscuit Factory, Glasgow; Rickett and Co., of Hull; and Baker, Simpson, and Co., of Cork. Of these, the four first-named firms have received medals for excellence of quality; Messrs. Baker, Simpson, and Co., honourable mention; while Messrs. Rickett and Co. alone have failed to secure an award. We have examined a large proportion of the biscuits exhibited. Those of Messrs. Peek and Co. are all machine-made, their form and composition being various. There appears to be in their case a distinct kind of biscuit suitable for every purpose for which such articles are ever likely to be in demand: there are luncheon, tea, and wine biscuits of different kinds, all made of the best materials. The biscuits of Messrs. M'Call and Stephen are equally entitled to favourable mention; while Messrs. Baker, Simpson, and Co. exhibit, amongst a variety of other kinds, a biscuit upon the manufacture of which great care has evidently been bestowed, and to which they have given the name of "International."

PREPARATIONS MADE FROM OATS AND BARLEY.

There are two exhibitors of the several preparations and articles made from oats and barley. These are all highly nutritive, the oatmeal containing a larger proportion of oily or fatty matter and of protein compounds than the finest English wheaten flour. Barley meal or flour, although a valuable article of diet, is less nutritive than wheat flour, and its starch corpuscles are less soluble, and therefore more difficult of digestion, unless they be thoroughly boiled, as when added to broth and soup. Mr. Thomas Styles exhibits a series of specimens illustrating the manufacture of the well-known Ashby's Prepared Groats for making gruel in a few minutes, Prepared Pearl Barley, and Prepared Peas and Pea Flour.

The fine Scotch oats from which the grits, or, as they are now more commonly called, groats, are made, are first kiln dried; they are then passed between a pair of mill-stones in order to separate the husks; the groats are again kiln dried before grinding, and finally dressed through a fine dressing machine. By this means only just the very finest portion of the kernel of the groat is left, and in cooking it there is no waste and no necessity for straining.

The process of making pearl barley is the same. The husks of the oat are used for various purposes, such as packing hams, bacon, &c., for long sea voyages, or when ground up, as a cheap pig's food.

The oat bran, or refuse, is often used for mixing with oatmeal, or is sold for dog-meal.

The bran, or refuse of barley, is used for the same purposes, but we are informed that one of its best uses, although it is not generally known, is to feed calves.

The outer husk of the pea is largely used for sheep feeding, and the bran, or refuse, for bacon drying.

The case of Mr. Styles is a very instructive one, and the articles exhibited are obviously of superior quality. The advantage of using these "prepared" articles, especially groats, is that they go much further, there being no waste in using them for gruel as there is with the ordinary, or Embden groats.

The old-established firm of mustard manufacturers, Messrs. Keen, Welch, and Co., and the well-known house of Robinson, Bellville, and Co., have recently united their interests, and trade together under the names of Keen, Robinson, Bellville, and Co. They exhibit samples of various descriptions and qualities of Groats and Barley.

The samples of Robinson's Patent Barley and Robinson's Patent Groats consist of the finest flour which can be prepared from the best descriptions of barley and of Scotch oats. The samples of Pearl and Scotch Barley, and of a new article termed Round Scotch Oatmeal, are also very superior. Indeed the whole of the specimens exhibited in this case are remarkable for their quality and excellence of manufacture, and for which a medal has been awarded these exhibitors.

PREPARED CORN FLOUR.

An article which within the last few years has come into very extensive use in this country is the Starch of Maize, or Indian Corn. There are several exhibitors of this article, under different names, in the Exhibition. At first it came entirely from America, but it is now made in large quantities in this country, especially in Scotland.

Although called the "flour of Indian corn," it is not really the flour or meal of that grain, as it consists only of the farina or starch. In its dietetic properties it resembles therefore an arrowroot, which, in fact, it really is, being, like it, destitute of nitrogen. To most descriptions of arrowroot we consider it to be preferable, on account of its sweeter flavour, and the absence of that earthy taste which in arrowroot is to some so objectionable.

There are three English exhibitors of the starch of Indian corn.

Messrs. Brown and Polson exhibit, amongst other articles, a series of samples of Indian Corn—the difference in the colour, size, and form of many of them is very remarkable—and samples of the farina of Indian Corn, and which they distinguish by the name of "Patent Corn Flour."

It is a snowy white and beautifully pure looking article, having all the characters, physical, chemical, and dietetic, of an arrowroot.

Besides the corn flour, Messrs. Brown and Polson exhibit samples of sago powder in the state in which it is imported, and also of sago farina prepared from this. The former has a brownish tinge, and represents the raw material, upon which Messrs. Brown and Polson operate; the latter is pure and white, constituting, in fact, an arrowroot, and one which will no doubt come into extensive use for many purposes.

Mr. William Polson exhibits a similar article under the name of "Imperial Patent Corn Flour." Between this corn flour and the one already noticed, not a shade of difference, either to the eye or on analysis, is discoverable. The remarks then made in the previous case apply equally to this.

Mr. William Mackean is likewise an exhibitor of corn flour, which is vended under the name of "St. Mirren's Prepared Corn Flour." It is as white as the purest arrowroot, crepitates like it when pressed, and examined with the microscope is seen to be composed wholly of the starch granules of maize, or Indian corn. It is fully equal to any of the other preparations sold under the denomination of Indian corn flour.

There are two other similar articles, of American origin, exhibited in the Exhibition, though not in the British division of Class III., and which being in extensive demand in this country, it is as well to notice in this place—namely, Kingsford's Oswego Prepared Corn and Duryea's Maizena.

The manufacture in this country of arrowroot from Indian corn dates only a few years back, and no samples of it were, we believe, shown in the Exhibition of 1851. This article ought, therefore, to have received some recognition from the jurors.

SIGNOR GARCIA AND THE LARYNGOSCOPE.—The University of Konigsberg, says the *Daily News*, has conferred on Signor Manuel Garcia, the celebrated vocalist, the degree of Doctor of Medicine, in honour of his invention of the Laryngoscope. It is said that his researches on the anatomy and functions of the vocal organs for his own professional purposes led to the discovery of so valuable an instrument.

ROYAL COLLEGE OF PHYSICIANS.

INTERROGATORIES CONCERNING LEPROSY.

THE following official documents are about to be circulated:—*

Royal College of Physicians.

The committee appointed by the College on June 14th, "to frame Interrogatories, with a view to obtain Reports from the West India Colonies on the subject of Leprosy," have prepared the following series.

As the disease is known to exist not only in many foreign countries, but also in various British colonies in the East, and elsewhere, the committee are of opinion that it is very desirable that the interrogatories should be sent to all the colonies of the empire.

Int. 1.—Is leprosy known in the colony of ? If so, be pleased briefly to describe it as it occurs there.

a. Are there several different forms or outward manifestations of leprosy? If so, by what names are they respectively known?

b. Are these several forms, in your opinion, only varieties of one common morbid state, or are they specifically distinct diseases, having no affinity with each other?

c. Please to enumerate succinctly the more obvious and distinguishing characters of each form of leprosy which you have seen.

Int. 2.—At what age does the disease generally manifest itself, and what are usually the earliest symptoms observable?

Int. 3.—At what period of life, and within what time, does the disease usually attain its full development? And at what period of life, and after what time, does it usually prove fatal?

Int. 4.—Is the disease more frequent in one sex than in the other? If so, in what proportion?

Int. 5.—Is it more frequent among certain races?—among the white, the coloured, or the black population?—and in what relative proportions?

Int. 6.—In what condition of society is the disease of most frequent occurrence, and what are the circumstances which seem to favour its development in individuals, or in groups of individuals?

Please to enumerate these circumstances under the following heads:—

a. The characters of the place or district where the disease most frequently occurs, in respect of its being urban or rural—on the sea-coast, or inland, low, damp, and malarial, or hilly and dry.

b. The sanitary condition of the dwellings, and of their immediate neighbourhood.

c. The habits of life, as to personal cleanliness or otherwise.

d. The ordinary diet and general way of living.

e. The occupation or employment.

Int. 7.—What conditions or circumstances of life seem to accelerate or aggravate the disease when it has once manifested itself in an individual?

Int. 8.—Does the disease appear often to be hereditary?

Have you known instances where one member only of a family has been affected while all the other members remained free from any trace of it?

Int. 9.—Have you reason to believe that leprosy is in any way dependent on or connected with syphilis, yaws, or any other disease?

Int. 10.—Have you met with instances of the disease appearing to be contagious in the ordinary sense of that term—*i. e.*, communicated to healthy persons by direct contact with, or close proximity to, diseased persons?

a. If so, in what stage was the malady in the diseased person? Were there ulcerations with a discharge?

b. Please to describe briefly the case or cases of contagious communication which you have seen yourself.

---

* The following letter is appended to these interrogatories:—

DR. PITMAN to Sir F. ROGERS.

Royal College of Physicians, London, Aug. 9th, 1862.

SIR,—I have the honour to forward a series of interrogatories, framed with a view to collect information concerning the disease of Leprosy, by a committee appointed by the College for that purpose, in compliance with a request of his Grace the Duke of Newcastle, conveyed in your letter of July 1st.

I am instructed to request that copies of the interrogatories, when printed, be forwarded to the College to be sent to those members of the profession in this country, or elsewhere, who may be able to furnish information to the committee of the College upon the subject in question.

I am, &c.,

(Signed) HENRY A. PITMAN, M.D., Registrar.

c. Does the disease seem to be transmissible by sexual intercourse?

Int. 11.—Are persons affected with leprosy permitted in the colony of to communicate freely with the rest of the community?—or is there any restriction imposed, or segregation enforced, in respect of them?

Int. 12.—What public provision is made for the reception and treatment of the leprous poor?

Are they admitted into the general hospitals?—or are there separate infirmaries or asylums provided for them?

Please to describe the structural and sanitary condition of such buildings and the arrangements made for the medical and hygienic treatment of the sick in them.

Int. 13.—Can you state the number of leprous persons maintained at the public expense in the colony of ?

Int. 14.—Have you reason, from personal knowledge, to believe that the disease has been of late years—say during the last fifteen or twenty years—on the increase in the colony of ? -or otherwise?

And if so, please to state what in your opinion may have contributed to its increase or its diminution.

Int. 15.—What results have you observed from the hygienic, the dietetic, or the medicinal treatment of the disease? Does leprosy ever undergo a spontaneous cure? and if so, at what stage of the disease?

Are you aware what proportion of the leprous poor treated at the public expense in the colony of recover wholly or partially?

Int. 16.—What is the estimated population of the colony of ? and when was the last census taken?

Is there a general and uniform registration of births and deaths, including the causes of death?—and if so, how long has such a registration existed?

Int. 17.—Can you state the name of the townships or districts in which leprosy prevails most, and give the number of lepers and the population in each of such townships or districts?

Please to add any other observations which you believe may serve to throw light upon the predisponent or exciting causes of the disease, or which may bear on its prevention, mitigation, or cure.

Any documents, printed or not, descriptive of the disease, as it has been observed at any time in the colony of with any reports of post-mortem examinations, or any pictorial illustrations, will be acceptable; also copies of the Annual Registration Returns, and of other works bearing on the vital statistics of the colony.

PARISIAN MEDICAL INTELLIGENCE.

(FROM OUR SPECIAL CORRESPONDENT.)

ALTHOUGH the ground destined to be occupied by the new wards of the Charité is completely cleared, building has not yet been commenced, Government deeming it advisable, no doubt, to await the assembling of the recently-formed Committee, and to profit by its counsels, before again venturing on a series of brick and mortar experiments. The soil on which the Charité stands is little better than a reclaimed marsh (the old Pré-aux-clercs, in fact, where so many quarrels hatched on the other side of the river were fought out three or four centuries ago), and is in this respect the very antipodes of the Lariboisière, the latter lying high and dry, and the former low, almost on the river level. It remains to be seen whether architectural ingenuity can or cannot counteract the disadvantages of position. The wards at present are always overcrowded, and often over-heated. The beds are too close together, and the windows too rarely opened. The atmosphere is vitiated by all sorts of foul effluvia, and a sallow sickly look hangs even on the features of the convalescent.

M. Beau, whom I followed round there a day or two ago, pointed out to me a case of chlorosis which he said might be perfectly qualified as an incomplete example of exophthalmic goître; the characteristic enlargement of the thyroid gland and the prominence of the eyeball being absent. It may be remembered that in the late discussion M. Trousseau referred to the occasional appearance of Graves' disease as a *maladie fruste*—that is to say, wanting in some of its characteristic elements, but nevertheless recognisable; whilst M. Beau, who maintains the identity of exophthalmic goître with chlorosis, looked upon the symptoms announced as characteristic of the new disease, as merely incidental features occurring in the chlorotic expression.

M. Henri Guitrac, assistant-professor of clinical medicine at Bordeaux, has been making some experiments tending to prove that the diminution in the girth of the chest may be added to the other symptoms of pulmonary phthisis. He commenced his investigations by accurately measuring the thoracic circumference in 140 individuals in good health, and then proceeded to a similar measurement in eighty cases of phthisis. His essay terminates with the following conclusions:—

1st. That the chest of phthisical patients offers a circumferential measurement relatively less than that met with in healthy subjects.

2nd. That this diminution, observable at the outset of tuberculization, increases with the progress of the disease, and may attain, during the latter period of the malady, an extent of six inches for the upper measurement (under the arms), of four inches for the central girth (across the breasts), and three for the lower part of the thorax.

3rd. That in the male the interval between the nipples gives an exact idea of the dimensions of the chest, representing the quarter of the central girth; and in the adult measuring in health seven and a half inches, seven and a quarter in the first stage of phthisis, and six and three-eighths in the second.

As a consequence of these observations, he thinks it highly advisable that a special exercise of the respiratory organs should be added to the ordinary measures of treatment. This exercise should consist in the dilatation of the thorax by graduated inspiratory efforts, and by such gymnastic movements as chiefly call into action the muscles of abduction.

At a late meeting of the Academy of Medicine, M. Bouvier read a paper upon various forms of canulæ and dilators which from time to time have been submitted for approbation by the Paris surgical instrument makers. M. Gosselin took the opportunity of calling the attention of his fellow academicians to the fact, that the prolonged sojourn of these instruments within the tracheal tube is apt to occasion ulceration of its walls and tedious necrosis of the cartilaginous rings, and perhaps, also, in cases of croup, extension of the inflammatory action, assuming the diphtheritic form, towards the bronchi, terminating in asphyxia. M. Gosselin, therefore, maintains that the greatest amelioration possible in the operation of tracheotomy would be the suppression of the canula, and the substitution of a dilator which should not penetrate within the tracheal canal.

M. Voisin brought forward a case of fatal cerebral disease, the subject of which had, for some time previously to death, been deprived of the power of speech. It will be remembered that, in M. Bouillaud's opinion, the faculty of speech depends upon the integrity of the upper portion of the anterior lobes of the brain. In this particular instance a cyst existed in the arachnoid membrane over the first and second cerebral convolutions in the region referred to by M. Bouillaud, the substance of the brain being depressed by the tumour. M. Voisin, therefore, agrees that the faculty of language resides in the cortical substance of the frontal convolutions and in the upper portion of the anterior cerebral lobes.

In a paper from M. Schiff, on the influence of the nervous centres upon the temperature of the frame, the author observes the following facts:—That the vaso motor nerves of the abdominal walls of the pelvic region, of the thigh, and of the upper part of the leg, decussate immediately after their entry into the spinal cord; that the vascular nerves of these parts coming from the right side run up the left side of the spinal marrow, and *vice versâ*; whilst, on the other hand, the vascular nerves of the lower part of the leg and of the foot proceed along the spinal cord without crossing. His experiments, he adds, tend to show a similar arrangement in the vaso-motor nerves of the upper extremities. In terminating his memoir, the author calls the attention of physicians to the remarkable fact, that in fever the local increase of temperature is most developed in those parts where the nerves supplying them do not decussate, as, for example, the face, the hand, the foot, the lower arm, and the leg. The vascular nerves of these parts appear therefore to form a separate group.

Paris, October, 1862.

HEALTH OF SCOTLAND.—During the month of September there were registered in the eight principal towns in Scotland the births of 2575 children, 1329 being males, and 1246 females. Of these 274 were illegitimate, being 10·6 per cent. The deaths registered during the month were 1754. Of these 870 were males, and 884 females, the rate of mortality being higher than in any previous September registered, except in 1857. The zymotic class of diseases proved fatal to 415 persons, or 23 per cent. of the mortality. The month was characterized by a high barometer; the quantity of rain that fell was, with one exception, the least recorded.

SIR BENJAMIN BRODIE.

WE deeply regret to have to state that the health of Sir Benjamin Brodie is in a condition to cause the utmost alarm to his friends. He has for some time been suffering from a grave and painful malady. He suffers less at present, sleeping much, but is in a state of profound exhaustion.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. — The following gentlemen passed the First Part of the Professional Examination for the Licence of the College on the 10th inst.:—

Carter, Richard, Charing-cross Hospital.
Forman, Elijah Baxter, Guy's Hospital.
Frost, Walter, Charing-cross Hospital.
Great-Rex, Adolphus Barnell, St. Bartholomew's Hospital.
Haward, John Warrington, St. George's Hospital.
Lyle, Thomas, St. Mary's Hospital.
Moore, Harry Gaze, Guy's Hospital.
Nash, Walter Llewellyn, St. Bartholomew's Hospital.
Terry, Septimus, St. George's Hospital.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 9th inst.:—

Bennett, Jas. Edward, Arlington-street, Camden-town.
Horton, Henry, Wednesbury, Staffordshire.
Miller, William, Scotland-road, Liverpool.
Oswald, Jas. Waddell Jeffreys, Berwick-on-Tweed.

UNIVERSITY OF ST. ANDREWS.—The following is a list of gentlemen on whom the degree of Doctor of Medicine was conferred in October, 1862:—

Ablett, Edward, London.
Ackland, Wm. H., Bideford, N. Devon.
Adams, James, Brechin.
Andrews, Fred. F., London.
Badcock, Lewis C., Camberwell-grove.
Baillie, Herbert, London.
Ballard, Thomas, London.
Barrett, John J., London.
Bate, Henry F., London.
Bell, James V., Rochester.
Berwick, George, Sunderland.
Beran, Thos. K., Carmarthen, S. Wales.
Birt, Thomas, Leamington.
Blanshard, Thomas, London.
Bolton, John A., Leicester.
Bone, William, Bures, Suffolk.
Bourne, Thomas, Radstock, Bath.
Braddon, Chas. H., Upton-on-Severn, Worcestershire.
Bradley, John D., Tullamore, Ireland.
Braine, Robt. S., Halifax, Nova Scotia.
Brainsford, Chas., Haverhill, Suffolk.
Britton, Thomas, St. Thomas's Hosp.
Brodie, George B., London.
Browning, Charles, London.
Brumwell, George M., Mossley, Lancashire.
Butler, Fred. J., Winchester.
Carpenter, John W., London.
Chessall, William, London.
Cleveland, William P., London.
Cockcroft, Thos. H., Heighley, Yorks.
Cogan, Cecil C., Greenwich, Kent.
Coles, Wm. F., Cerne-Abbas, Dorset.
Condon, Edmund H., Odiham, Hants.
Connolly, William, Royal Navy.
Crawford, Sam. K., Lurgan, Co. Armagh.
Davies, Frederick, London.
Dobson, Thos., Bowness, Windermere.
Dry, Thomas, London.
Edgcome, James, London.
Edmunds, James, London.
Edwards, Morgan J., Guy's Hospital.
Ellis, Edward, London.
Farquharson, Duncan, Tillicoultry.
Farrington, Wm. H., Lond. Fever Hosp.
Fisher, Luke, Preston, Lancashire.
Fletcher, John S., Manchester.
Frain, Joseph, South Shields.
Games, Stephen H., Liverpool.
Godwin, Ashton, Brompton, London.
Golder, James, Pollokshaws.
Green, Thomas, Cambridge.
Griffith, Samuel, Portmadoc, N. Wales.
Hall, Christopher, Swadlincote, Derby.
Harvey, Charles H., London.
Harvey, John, London.
Hearder, George I., Edinburgh.
Hislop, James, Glasgow.
Hodgson, Wm. J., Snaith, Yorkshire.
Horgan, William C., Drogheda.
Horner, Thomas, Stoke-Newington.
Howard, Francis, Black Rock, Dublin.
Hubert, Theodore K., Dunstable.
Hughes, Robert, Conway, N. Wales.
Hughes, Thomas, Anglesea.
Hunsley, Robert E., Yarrow, near Newcastle.
Ingham, Amos, Haworth, Yorkshire.
Jephcott, Samuel T., Chester.
Jones, Thomas, Ross, Herefordshire.
Kealy, John R., Gosport, Hants.
Kersey, Robert C., Littleborn, Kent.
Lancaster, Joseph, Clifton, Gloucestershire.
Lee, Herbert G, London.
Lister, Brian, Littlebro', Lancashire.
Logan, William, Co. Antrim, Ireland.
Lomas, William, London.
Mackern, Walter, London.
M'Nalty, George W., Dublin.
Mallet, William J., Manchester.
Masters, Maxwell T., London.
Meadows, Robert, King's Coll., Lond.
Morgan, W. W., Newport, Monmouthshire.
Moore, George, Hartlepool.
Moss, Hugh, Congleton, Cheshire.
Mulock, John B., London.
Neufield, Stephen, Manchester.
Newby, Thomas, Great Grimsby, Lincolnshire.
Nicholson, Joseph M., Holbeck, near Leeds.
Parsons, Samuel, London.
Perry, Marten, Evesham.
Pigg, Thomas, Newcastle-on-Tyne.
Pratt, Charles, Appleton, Devon.
Rendle, James D., London.
Renshaw, Charles J., Ashton-upon-Mersey, Cheshire.
Renshaw, Herbert S., Ashton-upon-Mersey, Cheshire.
Roe, John W., Ellesmere, Salop.
Rogers, Braithwaite, London.
Royle, Peter, Manchester.
Sadleir, William, Dublin.
Savile, George T., Beckford, near Hull.
Scully, Thomas, Tipperary.
Shea, Henry G., London.
Shillito, Joseph, Newcastle-on-Tyne.
Simpson, Thomas, Liverpool.
Skae, Charles H., Edinburgh.
Skrimshire, John T., Holt, Norfolk.
Smart, Bath C., Balsham.
Stark, Peter W., Lancaster.
Stevens, Robert S. J., Christchurch, Hants.
Swayne, Abraham C., Carrick, Ireland.
Symons, John, London.
Tanner, John, Tetbury, Gloucestershire.
Tassell, Robert, Canterbury, Kent.
Tatham, Thomas E., Huddersfield.
Thompson, John, Bideford.
Turtle, Frederick, London.
Vanderstraaten, Julian L., Colombo.
Walker, James, North Frodingham, Yorkshire.
Walker, John S., Hanley, Staffordshire.
Walton, Thomas S., London.
Watkins, Edwin T., London.
Watts, Horace N., Norwich.
West, Charles A., Cornwall.
White, Charles J., Brighton.
Whitmarsh, W. M., Chippenham, Wilts.
Whitmore, John, London.
Whitworth, John, Heckmondwike, near Leeds.
Willes, George J., London.
Williams, S. W. Duckworth, Northampton.
Wills, John, Child-Okeford, Dorset.
Yeld, Henry J., Sunderland.

CHOLERA AT PEKIN.—The cholera is still raging at Pekin.

YELLOW FEVER of most malignant type prevails at Wilmington, South Carolina.

THE "BLACK VOMIT" is making great havoc in the French fleet.

PROFESSOR LANGENBECK, of Berlin, has been commissioned by the Prussian Government to inspect and report on the surgical instruments in the International Exhibition.

SPA AT ALNMOUTH.—A spa has been discovered at Alnmouth, the water possessing qualities similar to those of Harrogate.

FEVER IN BARBADOES.—This season has been the hottest that has been known for some years in the West Indies. At Barbadoes there has been much fever among the troops.

QUARANTINE AT SURINAM.—Quarantine has been established on all vessels arriving at Surinam from Curaçoa, on account of the small pox prevailing there.

PAYMENT OF CORONERS.—According to an official document just issued, the payment to coroners in England and Wales for the year ending Michaelmas was £33,106 11s. 4d.

CRINOLINE.—Dr. Lankester calculates that there are six deaths per month in London arising from accidents consequent on the use of crinoline.

MALIGNANT FEVER IN PHILADELPHIA.—A malignant form of fever has broken out in Philadelphia. It is supposed to have been occasioned by some bags of fruit brought from the West Indies.

THE WEST COAST OF AFRICA has become much less fatal to Europeans since the advantage of sanitary precautions has been properly understood. Dr. Durrand states, that out of 200 Europeans only two died in two years.

SUICIDES IN THE ARMY.—The proportion of suicides in the army in 1860 was only 0·31 per thousand; the cases were only twenty-six in number, fourteen of them being by gunshot.

M.B. EXAMINATION OF THE UNIVERSITY OF LONDON.—The examination for the degree of Bachelor of Medicine of the University of London will commence on Monday, the 3rd of November.

THE INCOME OF ST. THOMAS'S HOSPITAL.—This hospital has an income altogether of upwards of £37,000 per annum; it receives from rents and funded property alone no less than £32,000.

COST OF LUNATICS.—During the year ending Michaelmas, the County Treasurers paid on account of lunatic asylums in England and Wales £131,696, and for pauper lunatics £33,150.

THE UNIVERSITY OF ST. ANDREWS AND DR. GAIRDNER.—In consequence of the acceptance by Dr. Gairdner of the Chair of Medicine in the University of Glasgow, he has resigned the office of Examiner at the University of St. Andrews.

ANATOMICAL LECTURES AT CAMBRIDGE.—Dr. Humphry commenced his course of lectures on Human Anatomy and Physiology on Tuesday last, at one o'clock, to be continued every Tuesday, Thursday, and Saturday.

WEST KENT INFIRMARY.—Much inconvenience has arisen from the destruction of the old central wards, the diminution of space rendering it difficult to find room for applicants for relief.

ARSENICAL ROOM-PAPER.—The Registrar-General's weekly report of the health of London again gives a case of the death of an aged woman (seventy-four) who died from the effect of diarrhœa, after ten weeks' illness, occasioned by the use of arsenically-coloured paper-hangings in the apartment.

DISEASES IN SHEEP AND CATTLE.—The necessity of an appeal to Government to adopt stringent measures to prevent the importation of foreign diseased sheep and cattle, the *Devizes Gazette* strongly urges, as many instances have been known in which the introduction of disease has been directly traceable to that source.

ST. THOMAS'S HOSPITAL.—The hospital at the Surrey Gardens was opened on Monday, the 15th of September, and the numbers admitted for the four weeks ending the 13th of October were 211, of which number 23 were accidents. At the old hospital, after being established for more than 300 years, the average weekly admissions were between seventy and eighty; and here, at the Surrey Gardens, after *twenty-eight days*, and very little publicity given to it, the weekly numbers are between *fifty* and *sixty*, which proclaims most unmistakably that the Governors have fixed upon the proper spot for the accommodation of the suffering poor of South London. The out-patient department shows even more strikingly the benefit of the locality to the suffering poor. For the first week, ending the 23rd of September, the numbers were 284; 2nd week, ending 30th of September, 658; 3rd week, ending 7th of October, 880; 4th, ending 13th of October, 1062; making 2884 in four weeks who had received medical and surgical assistance. The number of tickets issued to out-patients is necessarily limited, and the numbers in excess each day are very great, sometimes as many as fifty or sixty.

FEVER AT ROTHERHAM.—Fever continues to rage at Rotherham. Dr. E. J. Shearman, the Medical Officer of the Local Board of Health, says that the more he examines into individual cases the more convinced he feels that want of water, want of cleanliness, and want of ventilation, are the main causes of the fearful malady which prevails.

MUNIFICENT BEQUESTS.—The late Joseph Almond Cropper, Esq., Barrister of Gray's Inn, has left, among other munificent bequests, the following legacies, duty free:—£200 to the Kent and Canterbury Hospital, £200 to the Stafford Infirmary, and £100 each to twenty charitable institutions in London. He has also devised extensive landed property, in the county of Kent, to Westminster Hospital.—University College Hospital has just received a bequest of £300, by the late Mr. John Watson, £100 by the late Mr. Charles Cope, and £500 by the late Miss Charlotte Chitty.

THE SMALL-POX IN SHEEP has recently much abated in Wiltshire, no new cases having occurred. Precautionary measures, however, are maintained. It is said that another disease has made its appearance in North Wilts—viz., diphtheria among pigs, and that many animals have died from it in and about Lacock, near Chippenham.

UNIVERSITY COLLEGE HOSPITAL: COMFORT FOR THE SICK.—An improved system of nursing has been adopted in this hospital, and at the same time a great addition made to the comfort of the patients, by means of a special sick fund, provided for purposes for which the ordinary funds are not available. The committee have rendered themselves liable to the amount of £1000, of which considerably more than £800 has been already raised.

UNIVERSITY OF ST. ANDREWS: ADDITIONAL M.D. EXAMINATIONS.—"In consequence of the large number of gentlemen who have already expressed their intention of presenting themselves for examination for the degree of Doctor of Medicine in December, an additional examination, commencing on the 10th of November, will be held, providing thirty gentlemen intimate to Dr. Day, on or before the 1st of November, their desire to present themselves at that period."

GARIBALDI.—General Garibaldi's wound having, according to the *Movimento* of Genoa, presented during the last few days a less promising aspect than usual, his medical advisers desired to hold a consultation with Professors Zannetti, of Florence; Tommasi, of Pisa; and Gherini, of Milan. This consultation took place on the 9th, and the result was published in a bulletin, from which we learn that the general state of the patient is good, save an extreme leanness, the consequence of his sufferings and his being so long confined to his bed; but that he now suffers from rheumatic pains in the joints. Nevertheless the issue, according to the physicians, will be favourable, although anchylosis or stiffness will remain after the cure.

THE PUCKETT SUBSCRIPTION.—The indefatigable and most praiseworthy exertions of Mr. Griffin have resulted in the provision of a fund amounting to £1016 19*s.* 6*d.* With this amount has been purchased East India stock producing £37 annually, leaving a sufficient surplus to purchase in addition an annuity of £15 in the Norwich Union Life Office, in which Mr. Puckett had also insured his own life, making a total provision of £52 per annum. We are glad to see that the trustees (of whom Mr. Griffin is one) have made the best arrangements for securing the full advantage of this, not only to the widow, but also to her children, by placing the income thus provided under such wise restrictions as will prevent its anticipation.

HEALTH OF LONDON DURING THE WEEK ENDING SATURDAY, OCTOBER 11.—The deaths registered in London in the week were 1121. The deaths from scarlatina rose last week to 96; and those from diphtheria to 20. All the deaths from measles (52), except 2, occurred to children under four years of age. Sixteen children died from croup, and twenty-four of whooping-cough. Last week the births of 901 boys and 856 girls, in all 1757 children were registered in London.

MEDICAL VACANCIES.

THERE is a vacancy for a Physician at the Islington Dispensary, vice Dr. Hutchings Jackson, resigned.

The office of Apothecary to the Lock Hospital, Dean-street, Soho, is now vacant.

A vacancy has occurred for a House-Surgeon to the North Staffordshire Infirmary.

There is a vacancy for a House-Surgeon at the Coventry and Warwickshire Hospital.

MEDICAL APPOINTMENTS.

MR. CHARLES JENKYNS, has been appointed Medical Officer to the Pelham District of the Bishop Stortford Union, vice Mr. W. H. Moor, resigned.

Mr. W. H. Moor has been appointed Medical Officer to the South-East District of the Buntingford Union, vice Mr. W. H. Aldersey, resigned.

Dr. Wm. P. Jones has been elected Medical Officer to the South Dispensary, Liverpool, vice Dr. Thomas Skinner.

Dr. Chas. A. Cameron has been appointed Public Analyst for the City of Dublin.

Mr. Thos. Weddell has been re-elected Consulting Medical Officer for the Royal Northern Sea-Bathing Infirmary, Scarborough.

Dr. Henry Jackson has been elected Parochial Medical Officer for Aberdeen, vice Dr. George Jaffray Nicol, deceased.

Mr. Thos. Francis has been elected Medical Officer for District No. 1 of the Brentford Union, vice Mr. E. E. Day, resigned.

Mr. John Martin has succeeded the late Mr. Robert Mason as Medical Officer and Public Vaccinator for the Sherburn District of the Scarborough Union, Yorkshire.

Dr. Belcher has been appointed Secretary of the County and City of Cork Medical and Surgical Society, vice Dr. W. P. Bernard, deceased.

Mr. Wm. E. Lee has been elected House Surgeon to the Middlesex Hospital.

Mr. Henry Grace has been elected Medical Officer to the Stapleton Workhouse, Bristol, vice Dr. Edward Hodges, resigned.

Mr. David Mann has been appointed Medical Officer and Public Vaccinator for the Eastern District of the Township of Holbeck, Yorkshire, vice Dr. Thos. Dobson; Mr. Wm. Scott has been re-appointed Medical Officer and Public Vaccinator for the Western District; Mr. Joseph M. Nicholson has been appointed Medical Officer and Public Vaccinator for the Workhouse (a new appointment); and Dr. Dobson and Mr. Richard G. Horton have been appointed Public Vaccinators only.

Medical Diary of the Week.

MONDAY, Oct. 20	ST. MARK'S HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Operations, 1½ P.M. METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M. MEDICAL SOCIETY OF LONDON.—8½ P.M. Dr. Cotton, "On the Therapeutics of Consumption."
TUESDAY, Oct. 21	GUY'S HOSPITAL.—Operations, 1½ P.M. WESTMINSTER HOSPITAL.—Operations, 2 P.M. JUNIOR MEDICAL SOCIETY OF LONDON.—8 P.M. Meeting at Charing-cross Hospital. Mr. Frank W. Cooper, "On some Points in the Treatment of Delirium Tremens." PATHOLOGICAL SOCIETY OF LONDON.—8 P.M.
WEDNESDAY, Oct. 22	MIDDLESEX HOSPITAL.—Operations, 1 P.M. ST. MARY'S HOSPITAL.—Operations, 1 P.M. UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M. HUNTERIAN SOCIETY.—8 P.M. Dr. Fowler, "On a Case of Laceration of the Vagina during Labour—A Medico-Legal Question."
THURSDAY, Oct. 23	ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 1 P.M. LONDON HOSPITAL.—Operations, 1½ P.M. ROYAL FREE HOSPITAL.—Operations, 1½ P.M. GREAT NORTHERN HOSPITAL, KING'S CROSS.—Operations, 2 P.M. LONDON SURGICAL HOME.—Operations, 2 P.M. WEST LONDON HOSPITAL.—Operations, 2 P.M. ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
FRIDAY, Oct. 24	WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON.—8 P.M.
SATURDAY, Oct. 25	ST. THOMAS'S HOSPITAL.—Operations, 1 P.M. ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M. KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M. CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

To Correspondents.

Sceptic.—We believe that further inquiry into the nature of the so-called "rice glass" exhibited in the Japanese collection at Brompton has shown the first surmises to be erroneous. On being subjected to the blowpipe, it readily fuses without giving the slightest indication of containing organic matter. It is now thought to be simply a very fusible form of glass prepared in the ordinary way by ignition.

Mr. Hulme would oblige by forwarding the woodcuts to illustrate his paper.

DR. FOWLER'S "MEDICAL VOCABULARY"—IMPUTED PLAGIARISM.

To the Editor of THE LANCET.

SIR,—There has just issued from the press a work by Dr. R. G. Mayne, of Leeds, entitled "*A* Medical Vocabulary." I learn from one of his prefaces thereto that it is the second edition of a similarly titled book "published in 1836." "The first edition," he tells us ..... "formed the nucleus of a much more comprehensive work, the 'Expository Lexicon of Scientific Terms,' issued periodically in ten parts, the last on 17th September, 1860. Two months subsequently to the latter date," he continues, "I was startled by observing in the medical journals (Nov. 1860) an advertisement that 'next week will be published the Medical Vocabulary, by Robert Fowler, M.D. Edin.' ..... It was not, however, till 8th January, 1861, or nearly *four months after* the concluding part of my 'Expository Lexicon' appeared, that Dr. Fowler's 'Medical Vocabulary' was published."

Now, before proceeding to notice the doctor's subsequent errors of assumption, I will first dispose of these his egregious errors of facts.

My "Medical Vocabulary" was first advertised in the medical press on Saturday, 27th October, 1860, just about one month previous to the period implied by Dr. Mayne in his preface. The first portion of my manuscript was in the hands of the printers about the beginning of August of the same year, and I received therefrom the first proof-sheet on the 29th of the same month. The proofs followed in rapid succession. The first perfect copy of the work was delivered by the printers to the publisher on November 7th following; and the "Medical Vocabulary" was subscribed to the trade or published on November 21st, *just six days prior* to the subscription to the trade of Dr. Mayne's complete "Expository Lexicon," which occurred on November 27th, 1860.

The assertion, therefore, that my work was not published "till 8th January, 1861, or nearly *four months after* the concluding part of" Dr. Mayne's "Lexicon appeared," is *simply the reverse of that which is true.*

After thus indebting himself "to his imagination for his facts," our Lexicographer next proceeds to the unwarrantable assumption that I have made "too free with" *his* work; usurped "the title of such;" assumed "its plan, peculiar arrangement, &c.," and imitated them,—"but imperfectly."

Having distinctly pointed out the singular perversion of dates, so conveniently relied upon by Dr. Mayne as premisses whence to deduce his equally perverted inferences, it would almost appear superfluous for me to further controvert his imputed plagiarism.

> "But he that filches from me my good name,
> Robs me of that which not enriches him,
> And makes me poor indeed."

I therefore feel myself called upon to state, on my honour as a man, *that neither before nor during the whole period of the compilation of my "Medical Vocabulary," did I ever see, or in any way refer to, or copy from, any part or parts of Dr. Mayne's "Expository Lexicon."* I purposely avoided the work, not only by reason of my own sense of *honour*, but in deference to the written instructions of my publisher on his making the arrangements with me in 1858. It was his opinion that such a work as my "Medical Vocabulary" was a necessity of the day; and inasmuch as no second edition of the little work published in 1836 had ever appeared or was then (1858) announced, he very naturally concluded that the book was abandoned. Such an inference could not indeed have been otherwise, particularly as the sale of the work had been by no means a successful one; the remainder of the edition having been sold off, *about twenty years ago*, upon the London book-stalls at a very reduced price.

The author of this little book was besides unknown; consequently no inquiry could be possibly made as to his future intentions.

To accuse me, therefore, of usurping the title of a work so conditionated, and which for about twenty years had not even been seen in the market, is purely ridiculous.

It is scarcely necessary for me to add that I have *never seen* a copy of the *first* edition of this smaller work of Dr. Mayne's; and we may very reasonably infer that neither should I, nor anyone else, have ever cast eyes upon a *second* one of it, had it not been for the very favourable reception, both in and out of the profession,—and the consequent very great commercial success,—*of my own* "Medical Vocabulary."

My work has now been before the world for the last two years; and had I "filched" but one word only from either of Dr. Mayne's productions, I feel tolerably certain that I should long ere this have had to make my first acquaintance with the interior of the Court of Chancery.

Your obedient servant,
ROBERT FOWLER, M.D. Edin.,
Author of "*The* Medical Vocabulary."

Bishopsgate-street Without, Oct. 1862.

C. C. E.—A mixture of paraffin and wax has lately been strongly recommended for taking impressions of the mouth for dental purposes. It is stated to take much sharper impressions, and to be much more easily softened than wax alone.

LIFE ASSURANCE IN HEART DISEASE.

To the Editor of THE LANCET.

SIR,—Will some of your readers give me the benefit of their experience on the probable duration of life where a regurgitant aortic bruit only exists, and where the patient may have done everything to retard disease and its effects?

In the examination of a great number of candidates for entrance to benefit societies, I not unusually come across such cases of disease of the heart, and where a laborious occupation is being carried on with scarcely any discomfort. From my own practice during between three and four years, I believe it is the least harmful of all organic affections of the heart.

I remain, Sir, yours, &c.,
October, 1862. ENQUIRER.

Naturalist, (Devon.)—Though it is generally believed that the artificial formation of pearls may be induced by the introduction of foreign bodies into the shell of the oyster, yet it is a fact that sections of natural pearls never disclose any foreign substance, but merely one or more *centres of concretion*, around which the deposition of matter has regularly occurred.

M. A. B.—We are not aware of the existence of any such collection. Mr. Mayall and Messrs. Maull and Polyblank have photographed many members of the profession.

Jurisprudence.—An appeal should be made to the Commissioners in Lunacy.

THE ABERDEEN M.D. DEGREE.

To the Editor of THE LANCET.

SIR,—As there appears to be some doubt as to the nature of the examinations for the M.D. degree at Aberdeen, &c., will you be good enough to insert in your valuable journal the following paper on the Practice of Medicine, which was given in April, 1860, for the above degree. The examiner was Dr. Macrobin, Professor of Medicine in the University of Aberdeen. I select one paper only, as the whole examination would occupy too much of your valuable space, the other papers being in the same style. But this was not all. The candidates were examined *viva voce* in the following written paper, with additional questions on other diseases. I will now leave the profession to judge whether it is not equal to those given in any University or College in the United Kingdom.

Written Questions—Medicine.

1. Describe—1st, the pathological characters of the three stages of acute pneumonia; 2nd, the symptoms (including the stethoscopic and percussion signs) indicative of each stage or pathological condition; and 3rd, the treatment suitable at each stage, with the prescriptions written unabbreviated.
2. What are the different lesions of the valves of the heart; in what valve or valves are they met with most frequently; from what cause or causes do they arise; and how would you diagnose obstructive and regurgitant disease of the respective valves?
3. What are the symptoms of acute peritonitis; what are the pathological effects or products; what is the usual mode of death; and how would you treat it?
4. What are the appearances presented in chronic ulcer of the stomach; what is its most common seat; and what are its terminations?
5. What would be the condition of the urine in a case of dropsy depending on desquamative nephritis; and what would be the treatment for it, giving one or two prescriptions?
6. What are the most characteristic marks of the epileptic, hysterical, and tetanic spasm respectively; and what would be the general prognosis in each of these forms of spasm?
7. What nerve is specially involved in facial palsy; and what appearances does the patient present in this disease?
8. Describe a case of variola discreta, giving—1st, the symptoms which precede and usher in the eruption; 2nd, the characters of the eruption from its first appearance to the period of maturation; and 3rd, mention what are the chief sources of danger in the course of the malady.

I am, Sir, your obedient servant,
London, October, 1862. M.D. UNIVERSITY OF ABERDEEN.

R. F.—The idea of converting the vegetable fibres of broom (Genista scoparia) into paper is not original, more than one patent having been taken out in this country for the same application.

T. H. H.—The answer will be found in this day's LANCET.

THE PRELIMINARY EXAMINATION AT THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—I wish to state very briefly in your columns an act of injustice which has been committed not by, but against, the College of Surgeons. A person who signs himself "Judex" in your impression of last week complains in strong terms about the College of Surgeons not recognising the Arts examination of the Apothecaries' Hall, thus disqualifying his son from registering at the College. With all due deference to his judgment, I beg to say he is entirely in the wrong, as the College *does* recognise this examination. I have registered this examination at Lincoln's-inn-fields; also I know two other medical students who have done the same thing; and, to put the finishing stroke to this business, I distinctly heard the Registrar say that the Arts examination of the Hall was recognised by them.

Hoping the father and son will alike take warning by this, and not attack the College of Surgeons again without due cause,

I remain, Sir, yours very obediently,
October, 1862. A MEDICAL STUDENT.

Dr. Gasco, (Rome.)—The cause of the delay in the publication of the paper has been the great demand upon our space. Part of it appears in this day's LANCET. It is unnecessary to say that Dr. Gasco is labouring under a misapprehension respecting the queries he has put to us.

Hygiene.—Yes, the work named is commendable, as is also that of Dr. Headlam Greenhow.

POOR-LAW MEDICAL OFFICERS.

To the Editor of THE LANCET.

SIR,—Allow me to pass a few remarks on Mr. Green's letter, which appeared in your number of the 11th instant, headed "Poor-Law Surgeons."

I must, in the first place, express sorrow at Mr. Green's failure in obtaining the high and lucrative appointment of Poor-law medical officer; yet I can hardly conceive how he could expect to obtain such a post when he only holds the College diploma; for if Mr. Green had read the Consolidated Order (which is the guide for the guardians to elect their officers), wherein it clearly states that the medical officers must hold a medical as well as surgical diploma, he would have perceived that his title of "Poor-law surgeon" is wrong. It should have been Poor-law medical officer. I have no doubt if Mr. Green inquires, he will find that the old officer re-elected by the Market Bosworth Board of Guardians was doubly qualified, and Mr. Green unfortunately not—*ergo*, the guardians were justified by law in their choice. Of course the inconvenience sometimes occasioned to the poor by great distances is considerable.

I am, Sir, your obedient servant,
London, October, 1862. S. C. HEBB, L.R.C.P. Edin.

THE ST. ANDREWS DEGREE OF M.D.

To the Editor of THE LANCET.

SIR,—As a very large number of general practitioners from all parts of the United Kingdom are now taking advantage of the brief opportunity afforded by the University of St. Andrews for obtaining the degree of Doctor of Medicine, I venture to offer one or two observations with reference to the nature of the examinations to which every candidate is subjected who aspires to that distinction.

An impression prevails that the obtaining of this degree, as far as it applies to practitioners of some years' standing, is quite a matter of course; that they have merely to run down to St. Andrews, pay the customary fee, have a few minutes' pleasant chat with the Examiners on medical subjects, and the thing is accomplished.

Now, sir, he who goes there with that idea, and whose claims and pretensions have no better foundation than the fact of his being an old practitioner, will most assuredly come to grief. The examinations as applied to this class of candidates are essentially practical. The diagnosis, pathology, and treatment of disease are the essential points to which the questions, both written and oral, are directed, and on all these points a comprehensive and practical knowledge is required. The Examiners, all of whom are gentlemen of high eminence in their profession, and whose method of conducting the examinations is characterized by great courtesy and kindness, have, nevertheless, a way of finding out how much of a man's information is derived from practical experience, and how much from "cram;" and I need not say that whilst the former goes to the credit, the latter will be placed to the debit side of his account. But if additional evidence were needed to prove that these examinations are good sound tests of professional ability, it may be shown in the large number of candidates rejected at the examinations now just concluded. About 170 gentlemen went up for the degree, but only 129 obtained it, by which it will be seen that about 1 in 4, or 25 per cent. were found disqualified.

I remain, Sir, your obedient servant,

London, October, 1862. M.D. ST. ANDREWS.

SHADOWY DEGREES.

To the Editor of THE LANCET.

SIR,—I read your remarks last week on the subject of foreign Universities granting *in absentiâ* medical and other degrees. Had those remarks referred to the practice of some of them, they might have been correct; but in singling out Rostock, they display a very imperfect knowledge of the requirements of that University. It is true it has a correspondent in England, who, I believe, is not altogether unknown to THE LANCET, and it is on his introduction and recommendation alone that gentlemen are even admitted as candidates. I myself can speak of the great care taken that the degrees shall not be unworthily bestowed. Thinking the diploma of M.D. might be beneficial to myself, I had communication with that gentleman on the subject, and must confess I was not prepared for so strict an ordeal. I found it is absolutely necessary that every candidate must be *fully qualified* to practise in his own country, and he would, in addition, be required to submit to a most searching examination, such as would not discredit that required by our own medical bodies. Besides this, precautions which cannot be evaded are taken, as to the position, character, and identity of the candidate. And as with the medical, so with the other degrees granted by that University.

I think after this it would be as unjust to say the degrees are purchased, because fees are paid, as it would be to say they are purchased from our own Colleges, where the same practice prevails.

I do not intend to argue the point as to the desirability of a medical man, who has obtained the legal qualifications of his own country, seeking those of another. That is a subject on which each one must be left to his own judgment. My sole object has been to prove that degrees cannot be procured simply or principally on the payment of money from the University in question; and in addition to what I have stated, being myself *unqualified*, I speak from experience. Your obedient servant,

October, 1862. JUSTITIA.

*** We beg to disclaim all association with the University of Rostock, and altogether to repudiate the insinuation that the English correspondent of that distinguished institution has any connexion with this journal.—ED. L.

A SCOTTISH GRIEVANCE.

To the Editor of THE LANCET.

SIR,—Permit me to draw your attention to a matter of considerable importance, especially to the younger members of the profession. In almost every advertisement for house-surgeon to an infirmary or other public institution in England, it is stated as a condition of candidature that applicants must hold the diploma of the Royal College of Surgeons of England and the certificate of the London Society of Apothecaries. These and no other qualifications will be accepted. The University degrees of M.B. and C.M., or even the highest degree in medicine, M.D., and all the other qualifications sanctioned by the Medical Council, are of no avail. Candidates must be M.R.C.S. and L.S.A., and nothing else will satisfy the conditions.

Now, Sir, this is not only a great hardship, but a positive injustice. The Medical Act swept away all monopolies, and enacted that a qualification in Medicine and a qualification in Surgery from any of the bodies enumerated in Schedule (A) qualify to practise all branches of the profession *in any part* of her Majesty's dominions. This also qualifies for appointments in the public services, and it surely ought to satisfy the conditions of any hospital appointment as house-surgeon.

Governors of hospitals and other public institutions, I should think, only require their attention to be drawn to this crying anomaly to get it removed. If a proper representation of the matter were made to them on the subject, I have no doubt they would revise their regulations, and frame them more in accordance with the spirit of the age, and with the altered circumstances of the various licensing bodies. It is unfair, not only to many "legally qualified" gentlemen who would otherwise be candidates, but also to the hospitals themselves, as the governors must thus select from a restricted number of candidates in consequence of their absurd regulations.

Scottish candidates more particularly are most injuriously affected by these exclusive regulations, as they for the most part are graduates in Medicine and in Surgery of their Universities, or Licentiates in Medicine and in Surgery of some of the other licensing bodies, and seldom think of taking the certificate of the London Society of Apothecaries.

I hope, Sir, that you will employ your powerful pen in helping to sweep away this last vestige of monopoly.

I am, Sir, your obedient servant,

October, 1862. A SCOTTISH GRADUATE.

Dentist.—Arsenious acid is much employed in America for destroying the exposed pulp of teeth. Some writers assert that there is no other known article that accomplishes this purpose so quickly, so well, and with so little injury to the teeth, and so little pain or inconvenience to the patient.

FEMALE APOTHECARIES.

To the Editor of THE LANCET.

SIR,—In your impression of last Saturday is a letter written by "An Unqualified Assistant," in which the writer endeavours to show that females are inadmissible to the Licentiateship of the Hall. With due respect to your correspondent, I beg to differ from him. He bases his argument on the mere wording of the Act, not considering that the said Act was instituted in years gone by, when females were held to be incapable of occupying any position of trust or responsibility. Seeing, then, that it was never supposed that ladies would offer themselves for examination, the pronoun "he" was made use of. But this does not at all do away with a woman's right to be a Licentiate of the Hall. The Act was intended to provide a standard of knowledge, so that persons practising medicine should not be ignorant and unlearned.

We are reasonable beings, Mr. Editor, and there is no *reason* why women should not become good physicians. It may not seem *expedient*, but it is not *unreasonable!* Of late years a great desire to extend the province of women has sprung up and taken root in the public mind, and it would be a work of great cowardice to throw any impediment in the way of such advancement.

There is certainly no law to prevent a lady being an apothecary, and it is only by stretching the long bow that one can, like your correspondent, bring the mere wording of the Apothecaries Act to bear against their admission. Even then, when we consider the state of society, and the improbability—almost impossibility—of any female mastering the dry process of medical education, and offering herself for examination, we are compelled to take the Act in its sense, and not in its actual wording. When we bear in mind also that in no part of the said Act is there any regulation whereby women are debarred entering the Hall, the argument becomes conclusive; for if at any time the "powers that were" had thought it right to exclude the weaker sex, there would surely be some clause to that effect. A degree of knowledge must be acquired before a student can pass the examination at Hall or College, and why that certain standard is not as true when reached by women as when attained by men I am at a loss to conceive.

I shall now leave the question for an abler pen, and subscribe myself, Sir,

Your obedient servant,

Commercial-road, October, 1862. NEMO MORTALIUM.

To the Editor of THE LANCET.

SIR,—In your journal of last week is a letter from "An Unqualified Assistant," showing that the Apothecaries' Company have no legal right to grant their licence to a female. I fear, however, that they will insist on their assumed right, regardless of the opinion of the profession, unless some strong demonstration be made against it.

It strikes me that the most likely way to prevent the threatened calamity is for the medical students of the metropolitan hospitals to hold a public meeting, and emphatically declare that they will not study at any school to which female students may be admitted, and that they will not present themselves before the examiners of any university, college, or medical corporation which grants a qualification to them. I am very much mistaken if such a course do not prove more effectual in bringing the Society of Apothecaries to their senses than any other that can be adopted. Pray, Sir, continue to use your influence to avert the indignity with which the apothecaries threaten us.

I am, Sir, your obedient servant,

October, 1862. MEDICUS.

Mr. Joseph Young.—It is very difficult to form an opinion upon *ex-parte* statement. The questions raised are mostly of a purely technical character, and involve nice points of law.

M.D. Edin.—Yes, with care and economy.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Simpson; Mr. Redfern Davies; Mr. Hulme; Dr. Gason, Rome; Dr. Nichols; Mr. Mathison, Dublin; Dr. Ansell; Mr. Smith, Wolverhampton, (with enclosure;) Mr. Hoyland; Dr. Fowler; Mr. Reed; Mr. Perrins; Mr. Sunderland, (with enclosure;) Mr. Mason, Herne Bay, (with enclosure;) Mr. Coppin, Ripon; Mr. Clarke, (with enclosure;) Mr. Davis, Callington, (with enclosure;) Dr. Boyd, Belfast, (with enclosure;) Mr. Wright, Coxton; Mr. Whitford; Mr. Mowat, Frome, (with enclosure;) Dr. Hawkes; Dr. Stevenson, Barwash; Mr. Lee, Leeds, (with enclosure;) Mr. Pratt, Appledore, (with enclosure;) Mr. Butler, Guildford, (with enclosure;) Dr. Davey, Northwoods; Dr. Day, St. Andrews; Mr. Bingham; Mr. Hordley, Etruria; Mr. Loversedge; Dr. Rose, Kidderminster; Mr. Young, Sandwich; Mr. Davies, Llanelli; Mr. Scarth, (with enclosure;) Mr. Rees, Aberavon; Dr. Bienerhassett, Tonbridge, (with enclosure;) Mr. M'Cormick; Dr. Oliver, Edinburgh; Mr. Parker, Bath; Dr. Shaw, Edgware, (with enclosure;) Mr. Griffin, Weymouth; Dr. Beaugeard; Mr. Holt, Nottingham; Mr. Lutterworth; Mr. Hetherington, (with enclosure;) Mr. Kay, (with enclosure;) Mr. Copney; Mr. Bennett, Haxey, (with enclosure;) Mr. Kenyon, Wavertree; Mr. Harland, Mayfield, (with enclosure;) Mr. Pursell, Wolverhampton; Mr. Ball, Spalding; Mr. White; Mr. Rew, Exeter; Mr. Sprague, Kimbolton; Mr. Pratt, Cardiff, (with enclosure;) Dr. Cree, Belfast; Mr. Soden, Coventry; Mr. Ashe, (with enclosure;) Mr. J. Weaver, Llandrinio; Dr. Bristowe; Mr. Bennett, Liverpool; Mr. J. Clifton, Fordingbridge; Dr. Macdonald, Skye; Mr. Thomas, Camborne, (with enclosure;) Mr. Noble, Wickhambrook, (with enclosure;) Mr. Downing, Woolston; Dr. Evans, Narberth; Dr. Blanshard, (with enclosure;) Mr. Parsons; Mr. Morris, Prescot, (with enclosure;) Mr. Gay, (with enclosure;) Mr. Browne, (with enclosure;) Dr. Grally Hewitt; Mr. Robinson; Medicus, (with enclosure;) W. A.; A Scottish Graduate; Nemo Mortalium; A Subscriber; M. A. B.; Hygiene; M.D., (with enclosure;) L. M., (with enclosure;) Alpha, (with enclosure;) T. H. H.; M.D. St. Andrews; M.D. Aberdeen; Justitia; M.D. Edin.; Jurisprudence; A M.R.C.S., with two L.R.C.P.s in the same street; An Army Surgeon, Bengal; A. Z., (with enclosure;) A Medical Student; &c. &c.